

PHILADELPHIA, AUGUST 22, 1885.

ORIGINAL LECTURES.

ON ALEXANDER'S OPERATION FOR RETROVERSION OF THE UTERUS.

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THE patient, gentlemen, who has been brought before you, you will find, as the history is brought out, to be suffering from a condition which is sufficiently common, but for which, unfortunately, we have never been able to devise any means of radical cure. She tells us that she has always had some trouble at her confinements, and her last labor, six years ago, was attended with greater difficulty than any. As a result, she left the lying-in room more or less an invalid. For four or five weeks she suffered with distress referred chiefly to the left side of the pelvis, and there has been until the present time the following train of symptoms. Backache, located in the region of the sacrum, aggravated at the period of menstruation. The menstrual flow has been more profuse than normal, and consequently after it has ceased she feels exhausted rather than relieved by it. Moreover, menstruation has been painful,—not in the sense of acute lancinating pain, nor of the gripping pains often associated with constriction of the internal uterine os with retention of the menstrual fluid, but rather an increase of the backache and of the sense of pelvic fulness. She also suffers at this time from a good deal of pain extending down the limbs. Further, constipation more or less troublesome has been present during her illness, more pronounced during menstruation than at other times. In addition to these symptoms the patient has suffered more or less from headache; but this we have not been able to connect directly with the pelvic disorders. If you will recall cases which you have seen in the amphitheatre the past winter, you will remember that now and then we were able to associate the headache, from which these patients sometimes suffered, with derangements of the pelvic organs. But in the case of this woman we are not able to trace any such

direct relationship, but the other symptoms seem to depend directly upon the conditions which exist in the pelvis.

This patient has had the usual leucorrhœa. I say usual, because nearly all women who have the train of symptoms here presented have a certain amount of leucorrhœal discharge, generally more profuse within the first five or six days after menstruation.

We are unable to arrive at a diagnosis from the symptoms narrated. In fact, I may say that in the majority of the complaints which are due to changes in the pelvic organs the general symptoms afford us but little positive information as to the exact condition of those organs. We can arrive at a definite conclusion only by a careful physical examination. That is a fact which I wish to impress upon you, especially those of you who are less advanced in your studies, because you may find it difficult, owing to the natural modesty of women, to induce them to submit to the examination necessary for a correct diagnosis. You should give the patient to understand that, while far from insisting upon a physical exploration, at the same time such an investigation is necessary to arrive at a positive diagnosis, and that if you prescribe without making such an examination the treatment is based upon guess rather than upon certainty. In pursuing this course you will find that the large majority of women will sooner or later arrive at your view and be willing to aid you in every way to arrive at a correct conclusion.

Our chief reliance in making a physical examination of the pelvic contents is bimanual palpation. Sometimes inspection is necessary; but we are able to make a diagnosis in this case by the aid of bimanual palpation alone. Placing one hand upon the lower part of the abdomen and introducing the finger of the other into the vagina, I find the uterine body in Douglas's cul-de-sac, and between the cervix and this body is an angle, indicating that the organ is retroverted and retroflexed. The sound, when passed into the uterine canal, reaches to a distance about one-fourth farther than it would have done in the organ of normal size.

What we have here is a uterus, about one-fourth larger than when in its natural state, forced down into Douglas's pouch,

pressing upon the rectum, therefore interfering with the proper evacuation of the bowel. The organ being still more markedly increased in size during menstruation, presses then more directly upon the surrounding organs, and more or less directly upon the nerves passing through the sacral foramina to be distributed to the limbs, consequently giving rise to increased pain in the limbs. The constant passive congestion of the pelvic organs is added to at the menstrual period, and the flow is greater than it would be were the pelvic organs in their normal state. The headache from which the patient suffers might also be due to some displacement and congestion of the ovaries, an accompaniment of the retroversion of the uterus. Such a condition of the left ovary would be more likely to give rise to that symptom, inasmuch as it is located in front of the distended rectum, where it would be exposed to pressure. But, without speculating with regard to the possible effects produced by this dislocation of the womb, it is evident that there are sufficient symptoms caused by it to render the woman's life practically miserable, and to interfere with her household duties (of which she has many), and she needs some efficient treatment for her relief. We have for a long time tried to relieve her by cotton pledgets soaked in glycerin and menthol, and have also endeavored to secure benefit from the pessary; but she is unable to wear any such instrument, because of the pain and tenderness. This being the case, we propose to-day to do Alexander's operation, which consists in exposing the round ligaments at the external ring, and drawing them out through the ring, thus lifting the uterus. We then secure the ligaments near the external ring, so as to fix the uterus in its new position,—one of anteversion rather than of retroversion.

Let us briefly recall the relations of the round ligaments to the uterus, in order that we may see what will be the effect of shortening or drawing the ligaments through the inguinal canal. These ligaments take their origin in the cornua of the uterus, on each side. From this point they pass out along the upper—or, more accurately speaking, along the anterior—fold of the broad ligament. The highest point in the broad ligaments is the line of the Fallopian tubes and ovarian vessels, and it is just below that line, in the ante-

rior layer of the broad ligament, that you will find the muscular structure called the round ligament, in the form of a loop with its convexity downward. Passing outward, they reach the lineæ terminales about the pectineal eminence; thence passing over the internal border of the psoas muscle, they touch the external iliac vessels, along which they pass to gain the posterior face of Poupart's ligament; ascending thence the internal surface of the anterior abdominal wall to the internal inguinal ring, they pass down the inguinal canal to their attachment outside the external ring.

There is no doubt that in some cases the peritoneum is so closely attached to the structure of the round ligaments as to prevent us from pulling the ligaments through the inguinal canal. The dissections which I have made have taught me this, but the results of operations upon the living subject show that in some cases the ligament moves very freely upon its peritoneal attachment, and can be tightened by traction and the end sewed to the pillars of the external ring. Now, if you will bear in mind the attachment of the round ligaments, you will see at once that in making traction upon them the fundus of the uterus must be lifted upward and forward into the position where, in cases of posterior displacement, it is desired to retain it permanently.

[The following additional remarks concerning the operation in this case were made at the clinic a week later.]

GENTLEMEN,—Alexander's operation, performed upon a patient last Monday at this clinic, proved, so far as the immediate results were concerned, quite successful. I had hardly time then to explain to you all the points connected with the operation, especially regarding the surgical anatomy of the region concerned. The result obtained during the operation was that the ligament was shortened about two inches, its end being stitched to the face of the pubic bone, between the symphysis and the spine, in preference to the loose tissue on either side of the cut surfaces, for the reason that this tissue is in itself yielding, and would therefore be likely to give way, and perhaps in time permit the uterus to return to its former position. We found, after the operation, that the uterus had been lifted bodily out of the pelvis, so that

the fundus was almost in contact with the anterior abdominal wall. You will remember that previous to the operation the organ was markedly retroverted and retroflexed, being well down in Douglas's pouch. Unquestionably, then, the immediate result of the operation was the most radical cure of the posterior displacement which could be devised. The uterus was lifted higher than would have been possible by the use of any pessary.

But the next question which arose was, Would the ligament retain the womb in its improved position? In order to relieve the ligaments of strain by the weight of the uterus, the vagina was partly filled with cotton pledgets, which were thrust so far back into the posterior fossa as to support the uterus in its new position. We then applied the Lister dressings to the wounds, and they were not disturbed until yesterday. I put in a bone drain, for the reason that in this cellular tissue, especially if the patient be fat, there is very likely to be slow union. Union by first intention is not always the rule in places where there is much adipose tissue.

The result found on removing the dressing yesterday was, so far as the left side was concerned, perfect. On the right side there was a slight erysipelatous flush about the edges of the wound, which, however, has nearly or quite disappeared today. There was good union throughout both incisions, and the uterus is in its improved position.

It has been found that these patients must be kept in bed for at least a month in order that the new position of the round ligament may be permanent. At the end of that time the ordinary ring-pessary, or Smith's pessary, may be introduced into the vagina and allowed to remain for a month or two.

A word with regard to the operation itself. In the first place, as to the ease with which you can reach the external ring, nothing is simpler to do than this in the male. You have the cord and its accompanying vessels, which are so prominent that a mere tyro in surgery can reach the ring. But when you come to search for the external inguinal ring in the female, you will find that it is by no means so easy a matter. You know that the ring is immediately above and a little outside of the spine of the pubis, and that when the round ligament passes through this it be-

comes speedily lost in the connective tissue where the labia majora joins the mons veneris. My directions to you, then, in the performance of the operation would be to make a free incision just a little above and to the outside of the spine of the pubis; go down through the skin and superficial fascia until you strike the conjoined tendon. Having done that, you know you have reached tissue which goes to form the external ring, and it will then be a very simple matter to run your finger along this smooth surface down to the pubic spine, and the moment you reach this point you will feel the hardened, curvilinear edge of the external ring above and outside the spine.

If you attempt to determine the location of this ring, as has been advised, by invaginating the loose skin lying over the labia majora, following out the plan which we adopt in locating the ring in the male, in which case we invaginate the scrotum, you will find that the tissue is not sufficiently loose to permit you to thrust your finger in far enough to reach the ring. But clear away the skin, adipose tissue, and superficial fascia down to the surface of the conjoined tendon, and you will find it just as easy to mark the edges of the external ring in the female as in the male.

Having exposed the external ring, you must not expect to find the round ligament a distinct, well-marked, fibro-muscular band within its limits. You will find that the tissues all look very much alike, especially if you have permitted them to become blood-stained; but in the centre of the ring, passing directly beneath the arch over the canal, you will see some tissue resembling unstriped muscular structure, which is vascular intermixed with fat. Take your forceps, grasp this tissue, make traction upon it, and you will bring the cord into view. It is really the extremity of the cord, which is made up of this muscular tissue, fat, connective tissue, and the extremities of what corresponds to the cremasteric artery in the male. Having made traction upon this tissue and brought the cord into view, you will be able to shorten it sufficiently to raise the uterus.

I am particular in describing these steps in the operation, for the reason that the directions which have been given heretofore for the performance of the operation are not sufficiently clear to enable one to do it readily.

One other point. It seems that after drawing the cord out and stitching it in a new position, it will sometimes slough, and may allow the uterus to drop back, drawing the sloughing end of the cord with it into the abdominal cavity. This sloughing cord being drawn back into its sheath in the peritoneum, which covers it in its passage from the uterus to the internal ring, may give rise to a fatal result.

Whenever sloughing of the divided cord takes place, it must be due to one of two things: either to undue handling or to interference with the nutritive supply. That interference with nutrition may take place is evident when we study the blood-supply of the ligament, which is derived from two sources: the ovarian artery, where it enters the cornu of the uterus, sends one small branch into the round ligament, the analogue of the spermatic artery in the male. This vessel is quite small, but it seems to answer the purpose of furnishing nutrition to the ligament until the extremity is reached, and there it seems that the cord requires further blood-supply from some other region. Those of you who are familiar with the anatomy of this region in the male will remember that the deep epigastric artery, at a short distance from the point at which it is given off, sends a small branch to the spermatic cord, which is distributed to the cremaster muscle and is called the cremasteric artery. Now, in the female there is a similar artery, with this exception, that when it reaches the external inguinal ring, instead of being distributed as in the male you find it making a loop, turning directly backward, to be distributed to the extremity of the round ligament. Passing down the round ligament, the vessel probably—I say probably because I have not yet finished the dissection—anastomoses with the artery entering the ligament at the uterus.

Now, if you make great traction upon the round ligament, you will be likely, of course, to interfere with the calibre of its blood-vessels,—the artery and vein extending in the direction of the uterus; and if you cut off the end of the ligament or stitch it to the surrounding walls, and pass the ligature in such a way as to ligate the extremity of the ligament, you will interfere with the blood-supply from that direction. I would therefore suggest to you, in performing the operation, that you relieve the round ligament of traction as

much as possible by putting a cotton tampon into the vagina, so as to lift the uterus up and leave the ligaments lax, and, in stitching the end of the ligament in position, introduce the needle in such a way that the sutures shall be longitudinal to, and not bisecting, the tube. Draw the cord out, and, having located the spot upon the anterior surface of the pubis at which you desire to place it,—a point just to the inside of the spine,—pass your stitches coincidentally with the length of the cord, and, if you can do so, push the vessels to one side. If you are able to do all this, you will avoid interference with the circulation to any serious degree.

ORIGINAL COMMUNICATIONS.

DIURETICS AS THERAPEUTIC AGENTS.

BY V. M. REICHARD, M.D.

COMPLETE depuration is indispensable to healthy blood; and where the renal secretion is inadequate, either in its fluids or its solids, the general health must eventually suffer, for a circulating fluid loaded with impurities cannot keep the body up to its standard of usefulness. The kidney is a compound organ,—filtering and glandular. The Malpighian body is adapted specially to the filtering. "A large artery breaks up in a very direct manner into a number of minute branches, each of which opens into an assemblage of vessels of far greater capacity than itself, and from which there is but one narrow exit. Hence must arise a very abrupt retardation in the velocity of the current of the blood" (Bowman).* The Malpighian body hence acts as a filter, its activity being in direct proportion to the blood-pressure. The epithelium lining the tubules has a double function. Under ordinary circumstances it excretes, by its affinity for such substances, the urinary solids, and perhaps some foreign substances. Under certain conditions it also excretes urine.

This may be laid down as axiomatic: the more thoroughly the blood is depurated of the nitrogenized products of waste the more nearly perfect will be the working of the animal economy, other things being equal. The system must be rid of these waste products of metabolism before

* Fothergill's Hand-Book of Treatment.

it can take and properly assimilate more material. In fact, if we consider a healthy appetite as nature's call for food, we must have the blood purified before we can have a healthy appetite. Suppressed gout and the protean troubles arising from the retention in the blood of uric acid and its salts are frequently encountered in all classes, and, it is fairly to be presumed, are not recognized in a great many cases. I have found them usually limited (and the success of the treatment was considered as proof of the diagnosis) to stout, corpulent persons, and generally, but not always, hearty eaters. The lymphatic temperament prevailed, but in some cases it was the nervous. Whether, however, the nervousness was cause or effect I am not prepared to say. The patient's complaints are many,—indigestion, headache, desire to sleep after meals, sleeplessness at night or sleep disturbed by nightmare, pain in the back and a tired, worn-out feeling, coated tongue, bad breath, constipation, high-colored and scanty urine with a colored or white deposit on cooling; and any or all of these combined in a stout, sluggish person should lead to a strong suspicion that there are retained materials in the blood which the kidneys have failed to throw out. Whether the cause be deficient action of the kidney or improper action on the part of other organs, the result is the same. In persons predisposed, almost anything which disturbs the animal equilibrium may cause it. An attack of malaria, cholera morbus, excessive exertion in hot weather, prolonged anxiety, living secluded and taking but little exercise have all been noticed as causes in my cases. Fothergill* gives increased tissue-waste without compensating renal activity to carry off the waste as a cause of the typhoid state. A case of mine bears upon the point in question.

Mrs. P., æt. 40, widow, mother of eight children, stout and muscular, nursed a son through a long and severe attack of typhoid fever in August, 1883. In September was herself attacked; was confined to bed five weeks. Her temperature at no time exceeded 103° in the evening. Her emaciation was very great, the skin hanging in folds. The temperature returned to the normal, and she was discharged convalescent. In about three weeks she again consulted me. At this time the report says,—

3 P.M.—Temperature 103°; pulse 130, weak and thready; unable to lie down on account of dyspnoea; cough almost constant. Examination of the chest shows only a few râles posteriorly; no dulness anywhere. The tongue covered with a dark-brown dry coating all over, very heavy towards the back part; fauces red and inflamed; bowels torpid; urine very scanty and high-colored,—no chance to make a minute examination, but from the gross appearance the sediment, which formed about one-fourth of the volume, was composed of urates and mucus. Treatment: one-fourth grain of morphia and one grain of calomel every six hours; also one-half ounce of infusion of digitalis and ten grains of bitartrate of potassium given in a glass of water every four hours until the kidneys acted freely.

I was unable to see the case until about forty-two hours had elapsed: looks bright and has a cheery greeting; has slept well both nights; passing water freely; says she is "running away;" *no cough at all*; tongue clean; appetite ravenous, and she feels good on what she eats; bowels been opened several times; temperature *normal*; pulse full, then 80; the digitalis was given only every six hours, and at the end of a week she was ordered Basham's mixture. At this time she was out of bed. She has had trouble whenever she allows her kidneys to act less freely than they should.

I conceive the conditions to have been these. There had been great destruction of muscular and other tissue, producing much nitrogenized waste. For a time the kidneys were equal to the work. Convalescence came on and the temperature returned to the norm. But, the kidneys being to a greater or less extent functionally exhausted, and the blood-pressure being low, there was not enough of either fluid or solids thrown off. This will account for the condition in which she was found. The liver, clogged with the effete products of metabolism, was inactive, the crystals of uric acid in the walls of the bronchial tubes kept up a constant irritation, and the retained nitrogenized material caused the elevation of temperature. Whether this be true or not from a pathological stand-point, it is certain that treatment based on this reasoning was gratifying in the highest degree to both myself and the patient.

Whatever may be said as to diet applies more properly to the *prevention* of lithæmia. With the system clogged and all the organs handicapped with the products of waste, we must meet the indication by removing such products; and the rational treatment

* Quoted in Da Costa's Medical Diagnosis, p. 78a.

in such cases is to increase the action of the organs excreting such waste,—*i. e.*, the kidneys. This brings us to the subject of diuretics. These may be divided into two great classes: those in which the chief effect is an increase in the amount of urinary water, and those in which there is a decided increase in the urinary solids. The first act principally by raising the blood-pressure; the latter have a selective affinity for the renal epithelium, causing secretion of solids and—to a less degree—fluid. In the first class stands the digitalis group. In the second are the alkalies and most of that class of drugs known as urino-genitals. Of these last, buchu stands first as a diuretic. In considering these two classes, the most active will be taken and considered as the type of the whole class.

In the first class digitalis stands easily at the head, and of all its preparations the infusion is the diuretic *par excellence*. It (the infusion) seems to have some special action on the kidney. With no other preparation of the remedy, given even in equivalent doses, have I been able to secure the same amount of diuresis. The pulse may show the specific effect of the drug, and still the diuretic effect will not be produced to the same extent.

Much has been written and said about the cumulative effect of digitalis, but in my own use of the drug I have never had any bad result further than disordering the stomach. This it is sure to do if pushed strongly and continued for a week. But when a diuretic is indicated because of either dropsy or retained substances in the blood, and there is a rapid, weak pulse, the infusion of digitalis will act like a charm for a few days. After being given in decided doses for a few days (say a tablespoonful every four hours), it can be reduced either in the size or the number of the doses, so there will be not much danger of gastric disturbance. Sometimes, however, we are forced to abandon the use of the drug entirely until the tongue cleans and the stomach regains its normal tone.

In a recent case of extensive œdema of the lower extremities, due to cardiac dilatation, I secured the most happy results by intermitting the digitalis and giving con-vallaria. Though the latter had no appreciable diuretic action, yet as a cardiac tonic it sustained the heart until the digitalis could be resumed.

Caffeine has high authority in its favor as

a diuretic and cardiac tonic in advanced cases of cardiac dilatation. "A great advantage of caffeine is that its diuretic effects are seen even when the kidneys are altered."* I have had no experience with it, having found digitalis and con-vallaria sufficient in all cases.

Outside the body lithium carbonate will dissolve more uric acid than any other of the alkalies. I have had no experience with it, having confined myself entirely to the potash salts. The salts with vegetable acids break up readily in the blood, and its alkalinity is increased, carbonic acid being given off. The increased alkalinity of the blood renders the urine less acid, or alkaline, and the amount of urates deposited on cooling is diminished. All these alkalies, the acetate especially, increase the amount of urinary water as well as solids, and in choosing an alkali as a diuretic it is rather a matter of personal preference. The only thing to avoid is giving a soda salt, as the insoluble urate of sodium will be formed, and harm will result where good was expected.

Buchu stands as the type of diuretics the activity of which depends upon a volatile oil. It is indicated where a diuretic is indicated as a diuretic pure and simple, with no reference to the heart. In any case of idiopathic renal insufficiency it is the drug to be given, or if for any cause the amount of urinary water is to be increased without affecting the blood-pressure. Cases of lithæmia all do better if buchu be added to the alkali. A plan which I have often used with much satisfaction is to give about twenty grains of bitartrate of potassium with an ounce of infusion of buchu in a cup of cold water every three hours. Under its use I have seen nervous, depressed, neuralgic women brighten and clear up mentally and physically. After being literally "washed out," they have in a number of cases expressed the greatest satisfaction, and requested to be allowed to keep some of the medicine on hand.

In ordinary routine work, it may not always be possible to say in just what cases buchu and an alkali will do good. The effect, however, will soon show whether the diagnosis be right or wrong. As they are mostly subacute or chronic cases, one has a chance to make the trial of several diuretics.

FAIRPLAY, MD.

* Bull. Gén. de Thérap. Quoted in Amer. Jour. of Med. Sciences, October, 1884.

SOME STATISTICS OF HEPATIC DISEASES.

AN ANALYSIS OF CASES PRESENTED TO THE PATHOLOGICAL SOCIETY OF PHILADELPHIA FROM 1857 TO 1881, INCLUSIVE; WITH A DETAILED STUDY OF THE FATTY, THE CANCEROUS, AND THE CIRRHOTIC LIVER.

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(Continued from page 765.)

CARCINOMA OF THE LIVER.

FORTY-ONE instances of this affection were reported in two hundred and forty-six cases of hepatic disease. Of the forty-one, nine were primary, thirty-one secondary, and one was not classified with either division. Pursuing the same outline as when considering fatty liver, we find, in studying the causal condition, that *sex* was not a prominent factor. Thus, of the cases in which the sex was given, when primary, four were males, four females; when secondary, nineteen males and eleven females.

The *age* had much influence in the development of this disease. With the exception of one case in a child aged eighteen months and one of a female aged twenty-two years, all the primary cases occurred after forty; three from forty to fifty; two from fifty to sixty; and one from sixty to seventy. Save four cases in late adult life (twenty-seven to thirty-five), all the secondary cases occurred in the middle or later periods of life: thus, from forty to fifty, eleven; fifty to sixty, nine; sixty to seventy, four cases; and after eighty, one case. Prior to forty there were three females to one male; from forty to fifty, six males to one female; from fifty to sixty, eight males to one female; from sixty to seventy, three males to one female; and the patient that was over eighty years old was a female. The females then were in excess in the early, the males in the later periods of life.

Neither the *occupation* nor the *habits* seemed to have any determining influence on the disease. The occupation of but one patient who had the primary disease was given,—a laborer. Fifteen in whom the disease was secondary were of the lower classes of society, with the exception of a "manufacturer," who was possibly of the better class. Regarding the habits of the individuals, again but one primary case was recorded, and that one

was intemperate; while four of the secondary were intemperate, two were temperate, and one was of sedentary habits. The same may be said of the *previous health*. In no instance did it have any apparent influence. One primary and four secondary cases are recorded with previous good health; one of the secondary had had uterine disease, another rheumatism, and a third dyspepsia.

Race and *marital relations* showed similar negative influence. Two females and one male were colored. Five females and one male were married.

In the instance of *heredity* we have but little of decided value. One male, one female, and one whose sex was not recorded, in whom the disorder was primary, were noted as without hereditary tendency. The same tendency was absent in eight of the secondary cases. But two of the cases are positively affirmative. In the case of the female aged twenty-two, it was noted that her father had cancer of the breast, and in a man aged fifty-four the mother had had the disease in her face. In both the disease was primary. Compared with other statistics, these are complete: thus, of nine primary cases, heredity was noted as present or absent four times, twice in each instance. There were no cases in which nervous depression of any kind, a pre-existing constitutional change, or any previous local injury, irritation, or degeneration of the liver (in the primary cases) were recorded which could be looked upon as causal.

Pathological Anatomy.—In the above remarks the term carcinoma is used in a generic sense to include all forms of malignant diseases as they are embraced clinically. The series of forty-one cases include examples of the hard and soft, the colloid, the melanotic, and the hæmatoid cancer, or carcinoma telangiectodes, and two cases of cylindrical epithelioma. To specify: five of the nine cases of the primary disease were of the encephaloid variety, one was a cylindrical epithelioma, one a hæmatoid cancer, and three were not classified. In the secondary variety twelve belong to the encephaloid, twelve to the scirrhous groups, and one to the colloid and the melanotic; one was a cylindrical epithelioma, and three were not defined. The following table shows the relation of the various forms to the age and sex of the patient:

TABLE VI.—Showing the Age (arranged in Decades), the Sex, the Seat of the Primary Disease, the Presence or Absence of Secondary Deposits, and the Character of the New Growth, in Cases of Secondary Cancer of the Liver.

Decade.	Age.	Sex.	Seat of Primary Deposit.	Seat of Secondary Deposit in Addition to Liver.	Variety.
3d.	27	F.	Breast and skin.	Kidneys, mesenteric glands, and ovaries.	Epithelioma.
4th.	35	M.	Supra-renal capsule.	Mesenteric glands, lungs, and spleen.	—
	31	F.	Stomach.	Mesenteric glands.	Scirrhus.
	35	F.	"	Glands of lesser curvature.	—
5th.	45	M.	Pancreas.	No other secondary deposit.	Scirrhus.
	40	M.	" and mesenteric glands.	Right kidney.	Encephaloid.
	48	M.	Orbit.	Cervical and post-sternal glands.	Melanotic sarcoma.
	45	M.	Stomach.	Pancreas.	Encephaloid.
	49	M.	Pancreas.	Glands in the hepatic fissure.	Epithelioma.
	40	M.	Stomach.	Mesenteric glands.	Encephaloid.
	46	F.	Uterus.	" " and pleura.	—
	46	F.	Labium.	" " and glands of groin.	Encephaloid.
	45	F.	Leg.	No other secondary deposit.	"
	49	F.*	Skin.	Mediastinal glands, lung, and kidney.	—
40	F.	Breast.	Uterus and pleura.	Scirrhus.	
6th.	54	M.	Epithelioma of hand.	Lungs and spleen.	Encephaloid.
	58	M.	Rectum.	General.	Scirrhus and melanosis.
	56	M.	Stomach.	Mesenteric and bronchial glands.	Scirrhus.
	54	M.	"	" " glands and spleen.	"
	52	M.	Kidney.	Lung.	Encephaloid.
	59	M.	Stomach and duodenum.	Mesenteric glands.	Scirrhus.
	56	M.	Stomach.	" " and pancreas.	Encephaloid.
7th.	50	M.	"	" " and pancreas.	Scirrhus.
	50	F.*	Vagina.	Lungs.	Carcinoma gelatinosa.
	66	M.	Peritoneum.	No other secondary deposit.	Encephaloid.
8th.	62	M.	Stomach.	Mesenteric glands and glands in hepatic fissure.	Scirrhus.
	64	M.	"	Mesenteric glands and lung.	"
	65	F.	Breast.	Glands and osseous system.	"
9th.	81	F.	Pancreas.	Glands and lung.	"
No age report'd.	—	M.	Stomach.	—	Encephaloid.
—	—	—	Mesenteric glands.	No secondary deposit.	—
Total.	31	M. 19.			Scirrhus, 12; encephaloid, 12; epithelioma, 2; c. gelatinosa, 1; melanotic sarc., 1; no character mentioned, 3. = 31.
		F. 11.			

The striking feature of the table is the fact that the soft cancers are so much more frequent from forty to fifty years of age, the hard in the succeeding periods, while the epitheliomas are in the earlier periods of life.

Metastasis.—In connection with primary carcinoma of the liver, reproduction in other organs was noted in but two instances. The glands in the fissure of the liver were found to have undergone a similar degeneration in a case of encephaloid of that organ, and a tumor was found in the brain and a similar invasion of the pancreas and some mesenteric glands observed in a case of cylindrical epithelioma.

In the thirty-one instances in which the metastatic growth was seated in the liver, the original deposit varied very much in its position. In the largest number of instances the stomach was the primary source, twelve times: ten of the twelve were males, two females. Eight of the twelve cases were of the scirrhus variety, three of the encephaloid, and one was not recorded. In four instances in males the pancreas, in three in females the breast, was the primary seat of the disease. The remaining twelve cases had the growth in as many different organs of the body. In addition to the secondary involvement of the liver, in almost every instance other organs were included, at times the metastasis being general. The mesenteric glands were infected twenty

* Colored.

times,—six times alone, once each with the osseous system, the ovaries and kidney, the lung and kidney, the spleen, and the pancreas, twice with the pleura, and five times with the lung. Deposits were found also in the kidney and in the pancreas once each, in the lung and spleen once, and in the lung alone twice. To summarize. Along with secondary growths in the liver, similar deposits were found in other organs in twenty-six of the thirty-one instances. In one instance only was the metastasis confined to the liver, in two there is no record, and in the last of the thirty-one the condition was so remarkable as to be worthy of further notice. A case of scirrhous carcinoma of the rectum was presented, with the unusual accompaniment of universal melanosis. The melanotic deposits were found in every organ or tissue of the body, save in the brain, spinal cord, eyes, bones, joints, and muscles. Prof. Gross, Sr., the reporter, said the peculiarities of the case were the extensive distribution of the heterologous matter and the combination of melanosis with scirrhous, etc.

The above statistics correspond very closely with the facts of Frerich. It may be said, too, that the primary foci in twenty of the thirty-one cases were in the area of the portal circulation. There were no investigations into the cause of the metastasis by any of the reporters; no record of disease of the veins or lymphatics; no observation of the track of the infective material from the original source. Studying the evidence presented, there do not seem to be any facts to warrant one assuming any but a local origin for these tumors.

Macroscopical Appearances.—In every instance in which the carcinoma was primarily of hepatic origin the liver was invariably enlarged. The heaviest weighed fifteen and one-half pounds; the lightest one recorded weighed seven pounds fifteen ounces. Primary carcinoma is found in nodes, one or more in number, or as a diffused infiltration, the former appearance being in large excess. In the nine recorded cases, five were nodular, three diffused, and one not described. When in nodes, they were generally confined to one lobe, and did not amount to more than two in any cases save one, in which it was said the surface was studded with nodes, umbilicated and protruding, large in size, measuring from one-half to five inches in

diameter. In one instance the node was described as spherical, and twice as rounded. The size varied from the one-half-inch nodule to a mass which occupied the whole left lobe of the liver, or which contained over a quart of fluid, or to one which was five and five-eighths inches in diameter, or one the size of a large fist. One of the nodules was encapsulated; the remaining ones, though tolerably distinctly separated from the hepatic tissue, were not so circumscribed. The appearances on section, the umbilication, the character of the juice, and the retrogressive changes were the same as have been so often described. In one or two instances the extreme degree of central necrosis caused a large accumulation of fluid,—one a quart, dark brown, containing pulpy masses. The reporter called attention to the resemblance to abscess. One of the masses was described by Prof. Pepper as being composed of white nodules from a pea to a walnut in size, separated by bands of hepatic tissue, the centre of which was dense and fibrous, the periphery rose-pink with purple-red, and yielding no juice on section, and no points of hemorrhage. The location of the masses varied. Two were found in the right lobe alone, one in the left, and one in both lobes. The diffused primary infiltration is rare, yet, if read correctly, three of the nine were of this variety. In one the surface was studded and the structure infiltrated with the cancerous mass,—or the hepatic structure was displaced by circumscribed deposits of medullary cancerous tissue of a yellow-white color marbling the surface, rising in nodules in every direction, soft and compressible. This example probably should be classed as nodular. Again, the yellow masses ranged in size from a millet-seed to a walnut. In neither form was there a note made as to the condition of the veins or the gall-ducts.

The naked-eye appearance of the secondary carcinomatous liver varied very much also. Nineteen of the thirty-one cases presented enlargement of liver, four normal size, and two atrophy. In one of the last instances the liver weighed one pound fifteen ounces, contained but one nodule, and showed some depressions on its surface from perihepatitis. The disease developed secondarily to carcinoma of the pylorus. Here, too, the disease appears in nodes, but they are multiple generally. In

six instances, however, there was but one nodule. In other cases there were three or four (two) or "several" (two) to as many as thirty-five in one lobe, or to innumerable masses. The size varied from that of a pea to that of a cherry, a walnut, or an orange. In their gross characters the nodules resembled the nodules of primary disease. Retrograde change was frequently noted. In one case a dark-brown fluid, amounting to twenty-four ounces, was taken from an irregular cavity circumscribed by a membrane of new formation.

There were two or three of the reported cases which deserve a more extended notice. One rare and curious case reported by the late Prof. Gross, which has been tabulated under the secondary variety, presents the unusual phenomena of a carcinoma coexisting with general melanosis. The patient was a male, 58 years old, who had cancer (scirrhus) of the rectum. Later the melanosis developed. At the autopsy,—performed by Gross and Richardson (of New Orleans),—in addition to the scirrhus, melanotic tubercles were found underneath the skin, on the peritoneum and omentum, in the liver, pancreas, stomach, bowels, kidneys, supra-renal capsules, prostate gland, bladder, lymphatic glands of groins and pelvis, also in the lungs and bronchial glands, the heart and thyroid gland, and a small tubercle underneath "the serous coat of the left iliac artery." Prof. Gross remarks on the great extent of the disease, and the combination of the two forms of malignant disease. (See vol. i. p. 286.)

The other example of melanotic sarcoma developed secondary to an injury to the eye. The accident occurred in 1860. In 1865 a small tumor protruded from the eyeball and was removed. Recurrence took place in two years, and its removal was repeated three times. He finally died of the general metastasis in 1868, over three years after the development of the primary growth.

The solitary case of carcinoma telangiectodes is very remarkable, especially in the age of the patient in whom it developed. The child was but eight weeks old: the disease was only manifested ten days before death by enlargement and increase in firmness of the abdomen. Pain was the only marked symptom. The liver, at the autopsy, was found to weigh more than eleven and one-half ounces. The capsule was smooth, the color of the organ yellow.

The right lobe was normal. "The left lobe was the seat of a large, rounded growth, which occupied its entire extent, projecting from both surfaces. The tissue composing this mass appeared dark, in places almost blackish, through the capsule." The peritoneum was ruptured on one of its surfaces, over which was a clot of blood, while fluid blood was found in the peritoneal cavity.

The state of the tissue of the liver not invaded by the carcinoma was reported thirteen times. Eight times it was fatty, six of the times the carcinoma being of the medullary variety. Once each the organ was congested (presented the nutmeg-congestion), was cirrhotic, was pigmented, and contained an hydatid cyst.

Microscopical examination was not reported in detail in many of the cases. There were no special investigations as to the histogenesis of the carcinoma; no opinion expressed as to whether the disease developed from the hepatic cells or the duct epithelium; nor were there any accounts of the influence of veins, arteries, ducts, or lymphatics in the metastasis, save in the perfect report of one case by Dr. Shakespeare. A few of the more complete microscopical examinations are appended.

Prof. Tyson described the microscopical picture in a case of melanosis, saying, among other things, that the pigment was free and enclosed in cells; that the cells were irregular in size and shape, shrivelled, with one nucleus, and with fat-granules; that free nuclei and free oil-granules and drops were abundant, and that the pigment was in reddish flakes. The character of the pigment and its presence in the cells were specially commented upon.

The microscopical examination of the carcinoma telangiectodes was also made by Prof. Tyson. The morbid specimen was made up of a large-meshed stroma filled with blood-corpuscles and cells. They, the cells, are mostly pale, faintly granular, and generally contain one indistinct nucleus. Few multinuclear cells were present, comparatively. Others of the cells were more highly granular, and others completely fatty. Some free oil was present. The tissue was vascular; there were but few pigmented cells; and the blood was in abundance, apparently outside the vessels.

The case on which Dr. Shakespeare

made a microscopical report was very interesting. The primary disease was seated in the stomach, the secondary deposits were in the liver, omentum, and mesentery. On section, they presented the character of scirrhus. The cancerous growths around the vessels entering the liver developed from the endothelial coats of these vessels; and even in sections of the liver itself, to the finest ramification of the artery, this irritation could be traced. These nodules developed in the periphery of the lobe, opening from the tissue around the arterioles of the hepatic artery. The destruction of acini began in portions bounded by the arterioles.

Dr. Formad reported a case of primary cylindrical epithelioma of the liver, which, on section, showed the transformation of such process to a simple glandular carcinoma, as described by Perls.

In addition to the occurrence of secondary deposits in other organs along with similar deposits in the liver, the changes, if any, that these organs had undergone were studied with care, both in primary and secondary carcinoma of the liver. In the primary disease the condition of the spleen was recorded five times, each time as normal; the kidney, five times normal, once fatty; the heart as fatty once and normal once. The spleen was found to be healthy ten times, small twice, enlarged once, and very small once in fourteen cases of the secondary malignant disease. Under the same circumstances the kidney was recorded normal eight times, cystic twice, and fatty and atrophied once each. In one instance there was found tubercular disease of the lungs accompanying the dissimilar new formation. The case was reported by Da Costa and Woodward, and quite a discussion arose as to the occurrence of these double lesions. In the instance in which the spleen was enlarged there were also enlarged abdominal veins, indicating obstruction in the portal circulation.

The condition of the stomach and intestines was not often recorded. It will be remembered that in twelve instances the stomach was primarily diseased. Five times the organ was noted as healthy, four times as enlarged, twice as congested, once each as inflamed, as small, as ulcerated, as the seat of melanotic tubercles, and as unusual.

In one of the cases the duodenum and

small intestines were ulcerated; in another the duodenum was congested; in a third the duodenum and large intestines were highly congested.

An analysis of the symptoms is, in a measure, out of place in this pathological summary, and therefore the hasty sketch will include generally those symptoms which depend on anatomical change in the liver. It is difficult to make a comparative study of the symptoms in the secondary forms, on account of the blending of those of the original lesion with those referable to the liver. Taking the primary hepatic carcinoma for study first. In nine cases, jaundice was present in but two instances; ascites in one only, and that found at the autopsy; abdominal veins enlarged in one case; the spleen was not enlarged in any case; pain was present three times (severe in tumor), notably absent in two; emaciation was present in seven cases, absent entirely in one; in two instances cachexia was recorded as absent, in the remaining cases the record is negative; anæmia was noted once; weakness was explicitly recorded once only, but might be inferred in most of the cases; nausea and vomiting each occurred once; the bowels were normal in three, diarrhoea was present in two cases, and intestinal hemorrhage in one case. The most characteristic phenomenon was the change in the shape or size of the liver. Five times out of nine this organ was enlarged, twice it was enlarged and nodular, once it was enlarged, hard, and nodular, and once it was recorded as a tumor in the right hypochondrium. Practically, therefore, we may consider that emaciation and prostration, enlargement and nodular bossilation of the liver, with jaundice in a few instances, are the only common signs and symptoms of primary carcinomatous disease of that organ.

The symptoms of the secondary variety could generally be traced as depending upon the primary lesion. Thus, the jaundice, which occurred five times, was due to the involvement of adjacent organs, as the pancreas, lymphatic glands, or stomach. Ascites was not present nine times, but present five times, and could be explained by similar lesions as in jaundice. The spleen was not enlarged; the outline was similarly changed as in the primary disease in twelve of the cases. Emaciation was present seventeen times in the thirty-

one cases, prostration in almost as many, while the cachectic appearance was recorded in but three instances, and in two of these the liver was fatty. (See Woodward's remarks on fatty liver.)

It is difficult to determine the duration of the carcinoma at its best, and when histories are not as complete as they should be, nothing but general results can be obtained.

CIRRHOSIS OF THE LIVER.

The following remarks are based on an analysis of thirty-eight cases of this affection, representing the number of cases reported to the Society in which the chronic inflammation was more decided than any other lesion. Thus, of the eighty examples of fatty liver, in six cirrhosis was also present, but entirely subsidiary to the fatty changes. Dr. Fagge* has said that cirrhosis occurs much more frequently than we would expect from the number of times we are brought in contact with it at the bedside. In other words, often serious and extensive granular degeneration of this organ occurs without producing any signs or symptoms. The following analysis supports this view. Thus, seventeen times out of thirty-eight there were no symptoms of the hepatic disease, the patients having died of other affections, acute or chronic. To these must be added four instances in which the hepatic symptoms were present to a minor degree and might have been caused by the more serious accompanying affection which caused death. These symptoms were ascites and jaundice, the latter occurring but once in the four: in a case of cancer of the kidney. The ascites occurred in that case and also in the three remaining cases,—two of organic heart-disease and one of cancer of the pancreas. It is thus seen that twenty-one times in thirty-eight the disease was without symptoms. The remaining cases, seventeen in number, presented the symptoms of cirrhosis and were recognized as such during life.

Taking the entire number, the ages varied very much, but the time of most frequent occurrence was from the thirtieth to the sixtieth year. The table following gives the exact number of cases in each decade. The age was not recorded in two of the cases.

2	from	10	to	20.
2	"	20	"	30.
6	"	30	"	40.
7	"	40	"	50.
12	"	50	"	60.
3	"	60	"	70.
4	"	70	"	80.

The youngest subject was nineteen, the oldest seventy-six. Of the uncomplicated cases, the same proportion to each decade occurred. The ratio of males to females varied very much, there being thirty of the former to eight of the latter. Curiously, nearly half of all the females (three) were over seventy years of age. In all of them, as in the male of that age, the disease occurred concomitantly with disease of other organs, and was a part of the ageing process in all probability. The male was, however, also an alcoholic.

Further study of the predisposing and exciting causes of the disease confirmed the well-known influence of intemperance in this connection. It was distinctly recorded that nineteen of the cases gave a history of intemperance. Two of the intemperate had syphilis, two had organic heart-disease, one each had interstitial nephritis, general atheroma, cancer of the pancreas, and similar disease of the kidney. The syphilis, the heart-disease, and the carcinoma might have been coexisting causes; the nephritis and atheroma were results of the same cause. The eleven remaining intemperate cases were examples of simple, uncomplicated cirrhosis. Four of the remaining thirty-eight were temperate. The exciting cause in these cases was as follows: in one malaria; in one malaria and organic heart-disease; in one female, 73 years old, the hepatic disease was a part of a general sclerosis and degeneration; and in another, though but 58, the disease probably was part of the same process, the kidneys being associated. Nineteen, then, were intemperate, four temperate, and fifteen were not classified. Five of these cases died of acute disease, and there is nothing in the history by which to judge as to the cause. Of the final ten, organic heart-disease was the cause of the death of five, diabetes of two, carcinoma of the pancreas, carcinoma of the stomach, spinal caries, and tuberculosis of one each.

Neither the occupation, the family history, nor the occurrence of previous disease had anything to do with the develop-

* Guy's Hospital Reports.

ment of the disease in any instance. In no instance was there any note of obstruction in the hepatic duct being the primary cause.

Pathological Anatomy.—The *size* of the liver varied. Ten times it was small or contracted, nine times enlarged, and four times normal or thereabouts. The largest weight that was given was five pounds, the smallest two pounds two and a half ounces. In one the liver was reduced to the size of two fists, and its left lobe was almost entirely gone. The descriptions of the appearance of the liver varied very much. It was described as completely cirrhotic, four; cirrhotic, thirteen; slightly cirrhotic, two; cirrhotic and fatty, four; in the first stage of cirrhosis, three; and hob-nailed in appearance, four.

The following terms were applied to individual organs to mark their appearance: granulated, nutmeg appearance, the seat of fibrous deposit, nodular, firmly nodulated, irregular in outline, and granular. In one instance there was a combination of cirrhosis and hydatid disease. The *color* was described as brown-yellow in one instance. The *capsule* was noted as thickened, opaque, etc. The *consistence* was stated as hard, three; firm, three; elastic, one; dense, one; and tough, one. On section, one noted a creaking sensation.

The *spleen* varied considerably in size, the alteration being more noticeable in the simpler, uncomplicated forms of cirrhosis. In these cases five times it was enlarged and three times normal; once its capsule was thickened. One of the enlarged spleens was firm, another cirrhotic, a third pultaceous. In the complicated cases the spleen was small three times, normal once. The *kidneys* in the primarily uncomplicated cases were healthy twice, cirrhotic three times, congested once, and fatty once. It was cirrhotic six times in the nineteen remaining cases, four times congested, once fatty.

The *heart* was primarily diseased seven times. In the simple cases it had undergone hypertrophy, hypertrophic dilatation, fatty degeneration, and atrophy once each. That the liver is involved in the changes described as arising from arterio-capillary fibrosis there is no doubt. In four instances this appeared to be proved, for in them all there was conjoint atheroma and cirrhosis of the kidney, and twice the pancreas.

The influence of the obstructed circulation on the stomach and bowels was shown in a few instances. The gastric vein, a branch of the portal, it is well known anastomoses with the veins in the lower part of the œsophagus. These veins thus in cirrhosis become varicosed; infarcts and ulcers develop; hemorrhages occur, and rarely death takes place. In two of the cases recorded this accident occurred. Thrice the stomach was ulcerated; once its mucous membrane was congested. The histological appearances were not different from those usually seen in cirrhosis. New questions were not raised, and therefore the microscopic changes will be passed by.

Symptoms.—Our analytical study of the symptoms will embrace only the seventeen cases previously mentioned of simple cirrhosis. In the first place, the insidiousness of the disease is no more plainly seen than in the history of each individual case in reference to the occurrence of symptoms of the first stage. *Four* times only is any record made: in one case there was abdominal pain, in one failure in health, in one slight jaundice, in one biliousness.

The symptoms of the next stage are more complete. Physical examination of the liver revealed enlargement of the organ three times, and diminution in size four times. On palpation, it was determined to be "hard" once. The spleen was enlarged twice, normal twice. The autopsies showed it to be enlarged five times; hence it must have been overlooked. There were no cases in which there was enlargement of the abdominal veins. Ascites alone or with œdema was the most frequent symptom. Alone, it was recorded four times; with œdema, seven times. There was no ascites in three of the cases, and one had hydrothorax; while in two more the presence or absence of the condition was not recorded. Jaundice was marked in two instances, due to enlarged glands in the fissure of the liver probably; in a third and fourth it began during an attack of malaria, which was antecedent to the cirrhosis. Hemorrhage, both intestinal and gastric, took place in two cases. Diarrhœa occurred in six, nausea or vomiting in two, loss of appetite in three, hepatic pain in three cases, and epigastric pain in one case. Emaciation was expressly recorded three times, but could be implied much oftener; while

exhaustion was not recorded, but could be inferred. This is especially true, as in every instance death was caused by the hepatic disease alone or some complication of it, as hemorrhage, except in a case which died of peritonitis.

Finally, it may be said there was no evidence to show that the hepatic diseases had any deleterious influence on intercurrent diseases, as similar lesions of the kidneys have.

From this summary of symptoms it is learned that ascites is the most common symptom of cirrhosis of the liver; that gastro-intestinal catarrhs are the next most frequent; that enlargement of the spleen and changes in the size of the affected organ succeed the catarrhs in frequency; that hemorrhages and jaundice may occur; that enlargement of the abdominal veins is not common. If with these symptoms, considered in the sequence as above, the age and the habits of the patient are considered, and a degree of emaciation, prostration, and peculiar appearance of countenance taken into account, the diagnosis will not generally be difficult.

3705 POWELTON AVENUE.

REPORT ON THE PROGRESS OF MEDICINE.

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CHOLERA IN PARIS.

FOR reasons that are obvious, epidemic diseases are often best studied, from the clinical point of view, in localized outbreaks. The following observations by Lermoyez (*Le Progrès Médical*)—conducted in L'Hôpital Bichat, one of the smaller hospitals of Paris, set apart for the reception of cholera patients towards the close of 1884—are not without interest. The history of this hospital with reference to cholera is peculiar. Upon the appearance of the disease at Toulon in June, the hospital was made vacant and prepared for the reception of cholera patients, with a capacity of one hundred and thirty beds. In the course of three months there were sent to it by the police authorities about forty supposed cholera victims, which, upon investigation, proved to be cases of indigestion, bronchitis, leg-ulcer, phtheiriasis, many aged wretches, tramps, etc. One day in the beginning of August, they

sent a true case of cholera. This attracted great attention, excited the curiosity and received the visits of many persons both in and out of the profession, and the patient, having become a personage of importance, died happy. At the autopsy there were found the characteristic lesions of cholera. Thus commenced with the death of a rag-picker of Clichy the Paris cholera epidemic of 1884.

After that, for six weeks the physicians of the hospital treated cases of phthisis, two heart cases, one case of hernia, one of metritis, one of broken ribs, and, at the end of the time, lo! a second case of cholera. Others followed, seven in all, of whom five died. Seven cholera cases in three months for one hundred and thirty beds,—that is to say, about one seventeenth case per bed and per day!

The authorities then reopened the hospital to the usual applicants. The 1st of November its wards were again full. At once the cholera, which only seemed to have awaited a favorable opportunity, appeared in Paris. The one hundred and thirty beds were again vacated, and the institution became for the time being a cholera hospital. Sixty-one true cholera patients were sent to it by the municipal police; two cases only applied directly at the office of the hospital.

After some interesting statements concerning the localities from which these patients came, Lermoyez contributes observations upon the sex, age, occupation, and temperament of these individuals.

As a result of this analysis, he found that the cholera attacks more males than females,—the latter, in fact, undergoing less hardship, being less exposed to the evils of intemperance and other excesses, and leading much more regular lives than males; that the cholera is (except in very young infants, in whom it is almost always fatal) the more serious in proportion to the age of the patient; that its frequency is much greater in the middle period of life, the period of excess and fatigue; that its gravity is extreme in advanced age, when the feeble powers of the organism poorly withstand it; that the proportion of fatal cases is greater in women than in men. The last observation is at variance with the statistics of the epidemics of 1832, 1854, etc. No conclusions of importance could be drawn from the occupations of these persons. Eight were rag-

pickers, six worked in a refinery, three in an omnibus depot; there was one laundress, one nurse, two workers in copper. They were in common, however, the victims of unspeakable wretchedness, filth, poverty. Indeed, so poor were they that the clothing of twenty men who died yielded upon search a total fortune of thirty-two sous.

All those who suffered from any chronic pulmonary or intestinal lesion died. On the contrary, three, who were the subjects of cardiac lesions, recovered. Finally,—and this fact is so well understood that it is scarcely necessary to dwell upon its importance,—all those who admitted intemperate habits or who presented the signs of alcoholism, blurred as they might be by the features of cholera, perished. The mortality was fifty-two per cent., whereas in other hospitals it amounted to seventy-five or eighty per cent., a difference to be accounted for by the fact that the Hôpital Bichat was not open for the reception of cholera patients the second time until the 11th of November, when the violence of the epidemic had commenced to abate; for it is a fact well known in the history of cholera and illustrated in the epidemic in question, that the mortality is much greater at the commencement of epidemics than later. It has happened on more than one occasion that all the cases occurring during the first days of an outbreak have terminated fatally.

The cases observed commenced in one or the other of two ways: either abruptly, with vomiting and abundant diarrhœa, or insidiously, with the symptoms of a progressive intestinal catarrh, great depression, and tendency to chilliness. The cases beginning suddenly showed ten recoveries and eighteen deaths, a mortality of sixty-four per cent. The cases preceded by premonitory diarrhœa afforded twenty cures and fifteen deaths, a mortality of forty-three per cent. It would thus appear that abruptness of the attack in cholera is associated with intensity in its evolution. Lermoyez states that all the patients who perished in the course of a few hours after admission to the hospital algid and asphyxiated had been seized abruptly in the preceding night or even on the morning of the development of the characteristic complexus of symptoms. It must not, however, be overlooked that the premonitory diarrhœa may of itself

constitute a complete form of mild cholera, followed by recovery. Over and above the frequent form of termination by asphyxia and algidity, and of the usual recovery by a gentle and moderate reaction, Lermoyez observed two other modes of termination of unlike frequency, but of like gravity, as in both all the cases perish. One is the so-called typhoid reaction described by Griesinger, with progressive augmentation of temperature exceeding 104° F. in the axilla, drowsiness deepening to coma, delirium sometimes furious, flushing of the face, respiration and a vigorous circulation, a form rarely seen, and then only, as a rule, in alcoholic subjects. *Post mortem*, notwithstanding the symptoms during life, he found not the slightest trace of cerebral or meningeal congestion; in fact, only the characteristic intestinal lesions and congestion of the kidneys and lungs. In the second and more numerous group the patients recovered from the algid period and entered unsatisfactorily upon the period of reaction, only to grow cold again after a time and become again cyanosed, to suffer from suppression of urine, from dyspnoea, finally to die in the algid state of cholera from four to six days after the first development of the cold symptoms. These cases occurred not in alcoholic subjects as a rule, but rather in those who were anæmic and debilitated. This prolonged quasi-chronic form of cholera, with partially developed algidity and cyanosis, was likewise always fatal.

All the cases not ushered in by prodromic diarrhœa began suddenly with vomiting and uncontrollable dejections, even in some instances to the extent of fifty movements an hour. It was impossible to determine which of these two symptoms occurred first. Cramp was always some hours, often half a day, later; it invariably affected the legs and thighs, less often the arms, frequently the abdominal and thoracic walls. The cramp of the abdominal walls aggravated paroxysmally the constant colic experienced by the patient; the cramp of the thoracic walls accelerated the tendency to asphyxia. The muscular cramps of the limbs ceased spontaneously in from twelve to eighteen hours, even in fatal cases. During the period characterized by cramp, the slightest voluntary movement, a pressure, sometimes a touch, sufficed to excite it, so that

the patients found immobility the best remedy for their sufferings. Moderate percussion of an affected muscle during the interval between two attacks of cramp invariably excited a cushion-like, transverse thickening from muscular contraction, which lasted some minutes. This phenomenon was also observed for a short time after death in patients dying in the period of asphyxia.

Reaction was always announced by increased volume or return of the pulse, which became at the same time more rapid. On the other hand, thermometric observations furnished but vague and frequently contradictory signs. In truth, the condition of the pulse appeared at all times to furnish the best indication of the patient's general state.

With reference to the other symptoms there is little to say, except that, among them, anuria and thirst were the most constant; that during the cold stage the patients sometimes experienced an extraordinary sensation of hunger; that aphonia was rare, much more so than is stated in the text-books. Of the sixty-three cases observed, true aphonia occurred in one only; all the others were able to speak if sufficiently urged to do so. Deep injection of the inner segment of the ocular conjunctiva was present in all cases, and is to be accounted for partly by paresis of the orbicularis, partly by loss of elasticity of the skin and the resulting imperfect closure of the eyelids. Finally, as to the mental state of the patients, it was observed that during the period of asphyxia they were indifferent to what took place around them, and only replied to questions put with urgency and in a loud voice, the replies being frequently wholly irrelevant. Patients who recovered had no recollection of what occurred during the cold stage. Some were astonished to find themselves in the ward of the hospital; others had no recollection of the death of patients in neighboring beds; others, again, supposed themselves to have had merely a light attack of diarrhoea, and were astonished at their enfeebled condition. These facts are at variance with the statement of almost all the classical writers that cholera patients retain their clearness of intellect until death.

In several instances the reaction was attended by inability to pass urine, a symptom which disappeared after a few

days. Three of the patients were pregnant; of these one aborted at two and a half months, a second in the fourth month; a third, six months advanced, recovered without this accident. These facts are in accord with the rule formulated by Griesinger, that cholera produces almost always abortion, very rarely premature labor.

Three of the patients were seized in the period of reaction with violent colic attended by extremely fetid stools with intestinal hemorrhages. These cases all died. At the autopsy there was found not only the peculiar hemorrhagic colitis described by Niemeyer, but also an extreme cyanotic congestion of the whole intestinal tract, without a single trace of ulceration which would explain the hemorrhage by vascular rupture.

The treatment was, in the main, symptomatic; the two great indications of the cold stage being to warm the patient and to re-establish the circulation of the blood. All forms of external heat were employed. Vapor-baths administered in the bed produced no result beyond that of increasing the sufferings of the patient. Hot baths of mustard-water appeared to do better. Some of the patients were placed for one minute in water of a temperature of 40° C. In other instances the patients were placed in baths of 34° C. and allowed to remain five or six minutes, during the course of which time the temperature of the water was gradually increased to 38° C. Both of these methods appeared to be followed by good results, but the amelioration was transient, not lasting longer than two or three hours. In a few instances, after two or three baths, the cold stage terminated in favorable reaction.

Persuaded of the uselessness of internal medication during the cold stage, Lermoyez and his colleagues administered all medicines hypodermically. Thus given, ether appeared to be of great, caffeine of still greater use. In truth, after some observations, they came to the conclusion that the latter remedy prolonged life in the fatal cases and hastened the recovery in the curable ones. It was administered in doses of twenty to thirty centigrammes every two hours, the formula employed being that of Dujardin-Beaumetz:

R Caffeine, 4 grammes;
Salicylate of sodium, 3 grammes;
Distilled water, 6 grammes.

Fiat solutio.

These injections gave rise to no pain; they increased the force of the pulse and favorably influenced the action of the kidneys, in some instances even relieving the anuria during the cold stage. Alcohol, even in large doses, was followed by no good results. Opium and morphine are dangerous remedies, because as long as the individual secretes no urine they accumulate in the organism until, upon reaction, they may overwhelm the patient. Nevertheless, morphia is the only efficacious remedy for the sufferings of cholera. Given in combination with caffeine, its dangers are diminished: first, because of the antagonism of these two remedies, and further because caffeine, by acting on the kidneys, aids in the elimination of the derivatives of opium.

No attempts were made to control the diarrhoea, it being regarded as vain, and indeed almost impossible. Further, as the diarrhoea was for the most part unaccompanied by either tenesmus or tormina, and often appeared to relieve the sufferings of the patient, it was not interfered with. On the contrary, it was often necessary to combat the tendency to vomiting, which is one of the most painful symptoms of cholera. Among those patients who were permitted to drink freely of fluid, vomiting was indeed more abundant, but less fatiguing, than among those restricted in their amount of drink. Patients should be permitted to drink as freely as they wish, and in some instances as much as ten litres a day were consumed. A physician at Dijon, in the epidemic of 1865, placed at the bedside of his cholera patients a bucket of water, from which they were permitted to drink at will. The mortality among his patients was no greater than among those of his colleagues. The most acceptable fluids were found to be fresh and aerated waters. Cracked ice was also a great comfort. External cold was, in some instances, grateful to the patients, and was sometimes employed in preference to hot applications. Counter-irritation to the pit of the stomach and the inhalation of oxygen, as recommended by Hayem in the vomiting in pregnant women, failed to influence the vomiting of cholera patients. Morphine hypodermically controlled it, however. The intolerable dyspnoea of the cold stage yielded only to morphine; oxygen was wholly without effect.

VOL. XV.—24*

The liquor of Van Swieten was given in doses of forty drachms by the mouth, sixty grammes by injection. If we accept the views of Strauss, that the comma-bacillus by which the cholera-poison is elaborated remains localized in the intestines without, even in rapid cases, invading the tunics, it is of the utmost importance to introduce into the alimentary tube some parasiticide; especially in view of the fact that the failure of intestinal absorption, which contra-indicates the use of other internal remedies, favors the local action of the corrosive sublimate. The liquor of Van Swieten was well borne, apparently diminishing the vomiting, and seeming to be of use as regards the general disease. In the *foudroyant* form it was without action, but in the more protracted cases, where the cold stage continued for a long time, it appeared to influence favorably the course of the disease.

Intra-venous injections of artificial serum during the cold stage were in two cases followed by a result so prompt and so disastrous that this form of treatment was at once abandoned. To sum up the treatment of cholera in a few words, we may say that it consists in—

1. Hot applications and warm baths.
2. Subcutaneous injections of ether and caffeine.
3. The abundant use of the liquor of Van Swieten.
4. The very cautious subcutaneous injection of morphine for the relief of dyspnoea and vomiting.

In a large proportion of the cases, however, medication is useless, and, as has been said of the severest form of cerebro-spinal fever, so in cholera, the first symptoms of the disease are the first evidences of death.

TRANSLATIONS.

TREATMENT OF VARIOLA.—Dr. Reimer (*St. Petersburg. Med. Wochenschrift*) recommends as the best local application in adults Prof. Schwimmer's ointment, composed of olive oil (forty parts), precipitated chalk (sixty parts), and carbolic acid (from four to ten parts). This should be spread on a linen mask and reapplied every twelve hours. The results have been very satisfactory in preventing the development of pustules and keeping the skin of the face free from pitting. In young children

there is some danger of carbolic-acid absorption and poisoning to a greater or less degree.

As regards internal treatment, basing his opinions upon observations made upon thirteen hundred patients, he prefers the salicylate of sodium, given in five- to ten-grain doses day and night. In all his cases under this treatment there was marked improvement by the second day. It was also noted that the rod-shaped bodies in the blood, which have been pronounced to be the cause of the disease, disappeared as soon as the patient came under the influence of the agent; the number of micrococci was also markedly diminished.

LACTIC ACID TREATMENT OF TUBERCULOUS DEPOSITS.—Dr. H. Krause highly recommends the application of lactic acid to the laryngeal ulceration and swelling caused by tuberculous deposit. He begins with a ten-per-cent. solution, and rapidly increases it to eighty per cent. A number of cases are reported in which the ulceration was completely cured by these applications, notwithstanding the presence of tubercle-bacilli. In view of the unfavorable course which such cases generally pursue and the failure of all other treatment, the author thinks this is a decided step in advance. He also believes that lactic acid will be found useful in other disorders of the throat.—*Berliner Klin. Wochenschrift*, No. 29.

INSIDIOUS OSTEOMYELITIS.—M. Trélat, in reporting to the Congrès de Chirurgie a case of latent osteomyelitis, or "quiet necrosis," as it was called by Paget, directed especial attention to the development of a bone-disease proceeding to necrosis, and the formation of a sequestrum, without the existence of any appreciable systemic reaction. A primary operation of trephining over the external malleolus and removal of dead bone was unsuccessful, but two months later a large sequestrum was removed, and the patient recovered. There were no evidences of syphilitic infection. The disease was thought to be an osteosarcoma before he came to the hospital.—*La France Médicale*.

SEA-VOYAGES FOR CONSUMPTIVES.—Dr. L. Thaon (*Nice Méd.*), at the end of a communication, offers the following conclusions. Sea-voyages for consumptives should extend around the Cape from

Europe to Australia, made either by steamer and stopping at the Cape, or, preferably, on a sailing-vessel. During the voyage the lung-patients are generally free from hæmoptysis and from sea-sickness. Sea-voyages are contra-indicated in cases with fever, and in those having diseases of the bowel or larynx. The most positive results noticed are the prophylactic effect upon predisposed individuals, and the increased strength of consumptives in whom the local process has been healed. The sea-voyage can be made to alternate with wintering in the mountains for this class of cases.—*Deutsche Med. Zeitung*, No. 58.

LOCOMOTION OF THE BRAIN WITHIN THE SKULL.—The opinion of Luys, that there is a certain amount of locomotion of the cerebral lobes within the cranium, has received confirmation from an observation of Venturi (*Rivista Sperimentale di Freniatria e di Med. Legale*, 1885, No. 11), who found, upon examining the skull of a man who had died in an epileptic fit, that, corresponding with a growth involving the dura mater, there was a depression on the interior of the skull, and a groove, which plainly showed the effects of motion. The brain, he believes, follows the laws of gravity within certain limits in two ways,—first, within its membranes as a mass, and, secondly, through superficial extension of the dura mater. The movements during life appeared to have been principally those of partial turning towards the free side of the hemispheres, in a direction from the front or the back, corresponding with the direction of the principal mass of the brain.—*Centralblatt für die Med. Wissenschaften*, No. 29.

A CONTRIBUTION TO THE TREATMENT OF HYSTERICAL ATTACKS.—Dr. Ruault recommends compression of a superficial nerve-trunk in order to terminate an attack of hysteria. The face being always accessible, he prefers making pressure upon the infra-orbital nerves as they emerge from their foramina; but he has also compressed the ulnar nerve behind the inner condyle of the humerus. [This is better than attempts at compression of the ovaries, but is perhaps no more efficient than the well-known expedient of compressing the nostrils and making the patient breathe through the mouth.—ED.]—*La France Médicale*, No. 86.

PHILADELPHIA
MEDICAL TIMES.

PHILADELPHIA, AUGUST 22, 1885.

EDITORIAL.

THE ATTITUDE OF THE MEDICAL PROFESSION TOWARDS CRIMINALS.

THERE seems to be a growing tendency in some medical circles, at the present day, to regard crime merely as a manifestation of mental disorder: hence the more revolting and ingenious the crime the greater the *prima facie* evidence of insanity. The argument that inebriety also is a disease, a misfortune and not a fault, has been recently sustained with much ardor. From the postulate that outrageous conduct is incompatible with the existence of a healthy mind in a healthy body, the conclusions are at hand (1) that the criminal is naturally deficient in judgment, and (2) that this fact should serve to extenuate the offence, or at least to mitigate the severity of the legal penalties imposed. Unfortunately, the legal profession, like the medical, is not called upon to practise in a community of perfect beings, but each is obliged to adapt its methods to those who vary in many respects from the normal standard. If the descendants of intemperate or diseased progenitors can, while showing sufficient intelligence in managing the ordinary affairs of life, successfully plead irresponsibility as a defence when on trial for crimes they may commit (the crimes themselves giving evidence of skill, courage, and forethought), there is great danger that the laws which have been framed with the express purpose of preventing crime and punishing criminals may utterly fail of their purpose in the courts from want of jurisdiction.

There are several themes connected

with this subject which deserve serious consideration. In the first place, is the attitude of the medical profession towards crime, and those who commit offences against law and order, properly represented by certain specialists, who, while they cannot define the limits of variation in cerebral structure entirely consistent with sanity, yet speak very learnedly and positively about "evidences of imperfect organization" and other abnormalities of the "criminal brain" discovered at the autopsy? By this we do not mean to cast discredit upon pathological facts reported by Benedikt and others, but to protest against their hasty application to the problems of sociology.

When such a report is published, the "eminent alienist" enjoys a brief notoriety, but the reaction is injurious both to him and to the profession, inasmuch as to the community at large it involves the imputation that the legal punishment was unjust,—that the victim was not a responsible agent, and should not have been punished at all, but merely secluded for a greater or less period of time. Thereupon the public hastily forms the opinion that physicians can be found who will testify to the insanity of all criminals, and thus medical testimony is brought into discredit. With such comprehensive views of insanity, it is not surprising that the paradoxical doctrine should be maintained by some that "it is right sometimes to hang insane murderers,"—a doctrine which would be atrocious and disgraceful to our civilization if, in the definition of insanity, moral irresponsibility were really and essentially involved.

Furthermore, the tendency to regard the criminal as a curious development of social life and as an abnormality inviting scientific study leads to an aberration of humanitarianism, and the prisoner at once becomes the centre of a social sensation, the recipient of gifts and attentions, flowers, books, and friendly calls, and finds

himself exalted into a sort of a hero. For example, the attentions paid to the vile and repulsive negro murderer Rugg, of Long Island, a short time since were disgusting and demoralizing in the highest degree. The hanging of a murderer rarely occurs without the guilty wretch posing as a Christian martyr, hypocritically forgiving those who carry out the sentence of the law, and dying in full confidence of a blissful immortality. Does not the responsibility for this state of affairs rest partly upon the medical profession, which lends its authority in support of the opinion that the criminal is a victim and that he is unjustly punished?

Finally, the sanitation and discipline of jails and prisons have been carried to such perfection that they are no longer regarded with dread by the lawless class, whom we find constantly committing crime in order to obtain a comfortable home, where food and lodging and medical attendance are provided and very little is required in return. Is there not ground for the suspicion that some of our model prisons may really be regarded as institutions for the encouragement of crime? The nature of punishment, its effects upon the individual, and its practicability, as well as the minor details of prison-management, are subjects coming within the domain of sanitary science, and the profession should not hesitate to entertain and express positive views, based upon observation and sound judgment, on these important topics.

SOME RESULTS OF PUBLIC HEALTH WORK.

THE backwardness of sanitary work in this country is in no small degree due to the contempt with which many prominent physicians view the labors of sanitarians, both official and voluntary. To such we commend a short summary of the results accomplished in the State of Michigan, which accompanies the report of the health of that State during July,

1885. Comparing the prevalence of diseases for July, 1885, with the average for the same month for seven years previously, it is found that there was a marked diminution in nearly all diseases reported, this being most notable in such as are believed to depend largely upon insanitary surroundings. In intermittent and remittent fevers, dysentery and diarrhoea, cholera infantum, consumption, and typho-malarial fever the decrease varies from five to twenty-one per cent. In only two diseases, cerebro-spinal meningitis and tonsillitis, was there a slight increase over the average.

These results are attributed by Dr. Baker, the Secretary of the Michigan State Board of Health, to the sanitary revival brought about by the apprehension of cholera; but they are probably largely due to the systematic manner in which sanitary principles and methods have been impressed upon the people of Michigan through the medium of popular sanitary conventions, which are nowhere so successful as in that State. Other communities nearer home could well afford to take a lesson from Michigan in this matter.

LEGAL STATUS OF MEDICAL WORKS IN COURT.

THE vexed questions as to the admissibility of medical books in court, and the extent of the credence to be given to them, frequently come up for new adjudications and interpretation.

The most recent of the cases on the subject is found in one of the California courts, where it was held that medical works could not be read by counsel to the jury to prove the nature and probable effect of personal injuries. It was claimed that the common-law rulings had been changed in California by the adoption of a new Code, which declared that "historical works, books of science or art, and published maps or charts, when made by persons indifferent between the par-

ties," were "*prima facie* evidence of facts of general notoriety and interest," and the question was whether this legislation made medical books competent evidence. The discussion centred around what could be termed "facts of general notoriety and interest," and whether medical investigation and experience, as recorded in textbooks, come under this head. It was decided that they do not, but that such facts "include the meaning of words and allusions, which may be proved by ordinary dictionaries and authenticated books of general literary history, and facts in the exact sciences founded upon conclusions reached from certain and constant data by processes too intricate to be elucidated by witnesses when on examination." Thus, mortuary tables, chronological tables, recognized standards of weights, measures, and currency, are admissible. The rule as to medical works is thus stated: "But medicine is not considered as one of the exact sciences. It is of that character of inductive sciences which are based on data which each successive year may correct or expand, so that what is considered a sound induction last year may be considered an unsound one this year, and the very book which evidences the induction, if it does not become obsolete, may be altered in material features from edition to edition, so that we cannot tell, in citing from even a living author, whether what we read is not something that this very author now rejects."

—**THE PERSONAL EQUATION IN PRESCRIBING.**
—Dr. Roberts, in his address on Therapeutics before the British Medical Association, states an undoubted truth, when he declares that in resolving a problem in dietetics for the sick the physician "often ends by taking his own digestive organs as his type, and prescribes for his patients according to the likings and dislikings of his own stomach." It is especially noticed in the use of stimulants that the personal equation strongly influences the judgment. This is so true that the lecturer has evidently not himself been quite able to escape from it.

NOTES FROM SPECIAL CORRESPONDENTS.

PARIS.

CLEANSING of Great Cities.—It should not be without interest to some of the not-too-clean cities of America if we give some details of a novel project in Paris. Under Napoleon III., gigantic works were carried out here that greatly improved the sanitary condition of this city. Among the works was the plan carried out of directing the sewage out to Gennevilliers, to be used for irrigation purposes. Lately it was proposed to continue and extend this system, and to do away with cesspools by allowing *all* to go into the sewers and then direct it out to large plots of ground in the forest of St.-Germain and to the plains below Créteil. At present the system is divided. More than three-quarters of Paris houses have cesspools, which are emptied by the odorless method with steam-pumps; the other quarter of Paris, the newer houses, have the *tinette* system. These *tinettes* are large zinc receivers, about six feet high by two feet in diameter, round in shape, that are placed in the cellar under the pipes coming from the water-closets. The pipes empty into the *tinettes*, and these last have a pipe, allowing the liquid parts to run off into the sewers and retaining the solid matter. Carts come in daytime, detach the full *tinette*, and put an empty one in its place. This causes no smell, and is the best system so far invented.

This *tinette* system works so well that efforts have been made to pass a law to make all owners use it; but a slight calculation showed that it would require too many carts. Dr. Brouardel said it would take as many horses and carts to carry the *tinettes* and change them at each house weekly as there were omnibuses and horses in Paris,—a procession of these carts, for instance, like all the street-cars of Philadelphia, and going about as often.

To return to the project of placing these matters on ground near the city. The engineers maintained that the earth would purify everything. They forgot, however, that hygienic science has undergone a great revolution in these late years. M. Pasteur and his disciples have demonstrated that endemic and epidemic maladies are caused by germs, some of which have been found to live at least twelve years underground; also that the germs of typhoid fever and cholera, at least, are contained in alvine matter. The question then arises whether vegetables grown in fields thus saturated with an infectious liquid would not be contaminated, and is there not danger of pollution of wells and springs by filtration through the subterranean sheet of water?

The only remedy suggested by these facts is to remove the fecal matter from the houses by a special system of canalization to some distance beyond the city, and there have it treated at a heat of 150° C., so as to destroy all microbes. This plan is now recognized as the safest. Erect great furnaces and burn it all. After this complete disinfection, night-soil would still be useful for agricultural purposes.

Amygdalotomy.—Dr. De Saint-Germain gave some very practical remarks on this common operation that we are so often called upon to perform in the winter season. He said, "You noticed that I just refused, notwithstanding the entreaties of the parents, to perform the operation of extirpation of the tonsils in this child, although I performed it in two others. The fact is that this simple operation is not without danger in certain cases. How shall we know when not to operate? Well, there is a rule that you should never forget: it is never to cut the tonsils until they touch each other in the median line. It has been said that a child that has enlarged tonsils is subject to phthisis or to get diphtheria, but it is not true; large tonsils don't exercise such an influence over the general health. There are cases when you should refuse to operate. When you see the mucous membrane inflamed, and you see white spots, don't operate; wait, and under treatment it will regain its usual rosy color. Ought the tonsils to be cut at all ages? No. If the child is under two, wait, for fear that a loss of blood, however slight, may weaken the patient. From four years of age up to twelve is the period for operating. At twelve, if it is a girl, wait, for very often at this period or later menstruation may come on, and it will modify the condition so that no operation will be needed. From seventeen to nineteen, and in adults, hemorrhage may be feared. Here always remain at least an hour with them after the operation. As a last counsel, don't operate at all when there is an epidemic of diphtheria. Having decided to operate, what are the means used to perform the operation? All of you know the amygdalotome, so I won't describe it. I wish to say that I think it will pare or scrape the tonsil, but it will not extirpate it, so that some other doctor has often to be called in to complete the operation that you have left unfinished. It is, besides, an instrument that is difficult to keep clean, and I have seen the knife-edge break off and fall into the pharynx, so that I do not use this instrument at all. I use concave bistouries. The convex side is put against the adherent portion of the tonsil, and the concave side is towards the base of the tongue. Right and left instruments are used. With these instruments you can pluck the gland out of its socket completely, but you need a special pair of forceps. These are long pincers,

made so that they will not tear the substance, with triangular teeth that are flat, with a sort of gutter between, exactly like a small waffle-iron, from which you have so often enjoyed eating the cakes. Place the pincers horizontally, and the child will instinctively open its mouth wide, so that nothing remains but to cut the tonsil."

Treatment of Eczema.—M. Guibout is giving a series of lectures on treatment of skin-diseases. He thinks that the herpetic diathesis is a reality, and that a general treatment is indispensable, without which no cure can be assured. The local or external treatment is, however, important. Eczema being essentially an inflammatory trouble of the skin, emollients and antiphlogistics are called for. Greasy substances must not be used, because the most anodyne of pomades are subject to an acid fermentation and become irritating. For the same reason, poultices of linseed-meal are bad. All cold baths, both alkaline and sulphur, will irritate the skin, so that most mineral waters and sea-baths will only augment the irritation.

The treatment should be essentially antiphlogistic. Poultices of potato-flour, well cooked into a jelly, and applied wet, nearly cold, renewed three times in twenty-four hours, are good. Give warm baths, with bran or starch in the water (*cooked starch*). Lotions must be always warm, never cold. No local irritation or rubbing to be allowed. Take away all flannel or rough linen. These are, in short, the general rules to be observed; but the treatment must differ as to the kind of eczema and as to its seat.

In all the hairy parts there is an aggravation of the trouble, so that the hair must be cut short or shaved. On the face use a mask of rubber to apply the poultice. In the genital region insist on the horizontal position, with the legs apart. In the inferior members they should be kept a little raised; they must be kept in bed, and never be permitted to hang.

When the surface is very large, it may be rubbed with this liniment:

℞ Sweet almond oil, 100 grammes;

Lime-water, 100 grammes.—M.

After each application, powder the surface with starch-powder that is *not* perfumed. A bath of bran-water given warm every two days should follow.

Treatment of Eczema in Chronic Forms.—Here all is changed; the skin is hardened and its vitality is lowered. Irritants or excitants may now be used; baths of sulphur-water or the alkaline stimulants; frictions with black soap, oil of cade, or lotions of the corrosive chloride (one gramme of corrosive sublimate to five hundred grammes of water is used; a little alcohol may be added to dissolve), or pomade of boric acid:

℞ Acid. boric., 10 grammes;

Petrolati, 100 " M.

Treatment of Psoriasis.—While on skin-diseases, it may be well to give M. Guibout's treatment of psoriasis. Here we reach the acme of irritant treatment, as the trouble is a sort of mummification of the skin and transformation into a sort of shell, dry and crackling, without a shadow of vitality. The indications are to remove the epidermic scales and try to revive the lost vitality. The external treatment consists in friction and baths. The substances employed by M. Guibout are: the oil of cade extracted by distillation from the *Juniperus Oxycedrus*, and next in order pyrogallic acid. The oil of cade gives the best results. The whole of the body is well rubbed with it twice a day with a piece of cloth or flannel; then every other day a bath is given with from five hundred to six hundred grammes of subcarbonate of soda in it. If the treatment with pyrogallic acid is preferred, it should be combined with vaseline (ten to fifteen grammes of the acid to one hundred of vaseline), used in frictions twice a day, and alkaline baths to follow. The pyrogallic acid turns the skin black when exposed to the air; so it must not be used on the face or neck, as it takes a long while to get rid of the color.

Terpine.—This is a binitrate of turpentine in the form of large crystals. Alcohol dissolves fourteen per cent. of it, and this is the usual solution used. Professor Germain Sée has been trying it. He finds that it has a strong action on the bronchial mucous membrane, and that it will diminish the mucobronchial secretion and stop hemorrhages on the surface of the mucous membrane; in other words, terpine is a sort of bronchial desiccant. The dose is one gramme, or 1 gr. 20. It has great advantages over creasote or tar, is harmless and digestible, and may be employed with success in the hæmoptysis of commencing phthisis, and in the treatment of pulmonary catarrhs and chronic bronchitis. It is certainly the best means of lessening the bronchial hypersecretion; but Dr. Sée holds that the iodide of potassium and pyridine are the best remedies for asthma.

Experiments on Decapitated Criminals.—Some little excitement was created at the Société de Biologie by a war of words between M. P. Bert and Dr. Laborde, who has been making these experiments. M. Bert holds that they are useless, and may be made just as well—indeed, better—on animals. M. Laborde got very indignant that M. Bert, the great physiologist, should act as an obstructionist and prevent important experiments under a pretext that sensibility might come on again. If it was possible, it was an argument in favor of abolishing decapitation. M. Laborde maintained the usefulness and interest of his experiments.

Results of Treatment of Weak Infants.—M. Tarnier presented to the Académie de

Médecine two infants which he had raised in an artificial "*couveuse*," or hatching-machine, which was kept at a temperature of 32° to 37°. They were fed by introducing into the baby's stomach a sound (No. 16 urethral) which had a small glass funnel attached to it. After many trials, Dr. Tarnier found woman's milk to be the best food. As a rule, eight grammes were injected every hour. Later, cow's milk was alternated with the mother's milk. As soon as the milk is introduced into the stomach the sound must be withdrawn, or vomiting will follow. Both these children were born before term, one before the seventh month and one about the sixth month.

Prophylaxy of Cholera by means of Hypodermic Injections of Pure Cultures of the Comma-Bacillus.—It has come out that Dr. Ferran's communication to the Academy of Sciences was to the effect that the vaccine used was simply a pure culture of the comma-bacillus in a nutritive soup, and the degree of virulence was in direct relation to the sample of real cholera that the bacilli were taken from. The best vaccine was the most virulent; that is, the one that produced the greatest number of cases of experimental cholera in the persons vaccinated. The dose employed was a cubic centimetre of the culture. The symptoms produced did not need any therapeutic interference, and if needed a solution could be used to act when it was diluted. Three inoculations were given, one every five days, in both arms about the region of the triceps. It is thought that this will procure an immunity of at least a period of two months. There is nothing new to add in reference to Dr. Ferran's inoculation. All await his promised complete work that he says he intends to present to the French Academy. In the mean time the cholera is making fearful ravages in Spain, and his method is much discredited.

Treatment of Lumbar Neuralgias coming from Affections of the Uterus.—Dr. Naudin recommends the following:

℞ Chloroformi, 10 grammes;
Ætheris, 25 grammes;
Tinct. opii, 6 grammes;
Glycerini, 90 grammes. M.

S.—Rub on the painful part morning and night.

Powder for Pyrosis.—(Dr. Peret.)

℞ Sodii bicarb., 2 grammes, 50 centigr.;
Pulv. cretæ, 1 gramme;
Ext. nucis vomicæ, 10 centigrammes. M.

S.—Divide in ten powders; give one s. t. d.

Injection in a Case of Blennorrhagia complicated with Hæmaturia.—(Dr. Brodet.)

℞ Chloral. hydratis, 4 grammes;
Aquæ destill., 250 grammes. M.

S. Three injections daily.

These injections are not painful.

THOMAS LINN, M.D.

PARIS, FRANCE, August, 1885.

BOSTON.

PENSION-BOARD CHANGES — A GOOD APPOINTMENT — SUMMER EXCURSIONS FOR SICK CHILDREN.

AMONG the matters of special interest to the medical profession in this city at the present time are the recent changes in the Board of Pension Examiners. For some time past there have been unfortunate occurrences in connection with this Board which have undermined the popular confidence in it. A former member, a physician, was charged with exacting a premium from persons whose claims to a pension he allowed, under the form of a "subscription" to shares in the stock of a worthless corporation. This matter is still before the courts, one trial having occurred which resulted in a disagreement of the jury. Since this affair the Board has been reorganized. One of the early appointees of Commissioner Black was a man whose character was such that the other members remonstrated and presented to the Commissioner charges embodying their objections to serving on the Board with this man. These charges, it is said, were referred by the Commissioner to General Butler, the counsel for the accused, who naturally reported in favor of his client, and the appointment was made. Drs. Whittier and Gavin, of the Board, at once presented their resignations.

Dr. Prince, a Democrat and son of a former mayor of Boston, was then appointed; but he too at once refused to serve with the man in question. Naturally, much comment was excited, and questions were freely asked as to why these men, all of excellent personal and professional reputation, were unwilling to serve. Dr. Whittier has replied with an open letter to Commissioner Black, making public the charges which he had previously made in private, and which he accuses the Commissioner of never having examined further than by a general reference to an interested party. These accusations, which are very definite and direct in character, implicate the appointee in fraudulent action connected with a case of so-called "graveyard" insurance. The methods of work of the Examining Board are such that each member is responsible conjointly with his associates, so that any wrong-doing on the part of one member can easily compromise his colleagues. The unpleasant position in which other gentlemen have been placed by the maladministration of one of their associates is abundant reason why any man should feel it necessary to protect himself against similar entanglement. Meantime, the Board has been filled and organized by men willing to serve in connection with the accused member; but no steps have been taken by the pension authorities to investigate charges which, whether true or not, are, so long as they remain unanswered, a

constant obstacle in the minds of a large portion of the public to that confidence which should be enjoyed by a Board charged with so great a trust as that involved in the obligation of our country to its infirm and suffering defenders.

The Governor of Massachusetts has appointed Dr. Samuel A. Green, formerly city physician and ex-mayor of Boston, to the position on the State Board of Health, Lunacy, and Charity formerly held by Dr. H. P. Walcott. The fitness of this appointment (if the vacancy must needs have existed) is universally recognized. The great experience of Dr. Green with epidemic diseases and his familiarity with administrative methods will make him an exceedingly valuable member of the Board. By the way, two gentlemen who have served upon this Board, Drs. Walcott and Folsom, together with Dr. S. W. Abbott, at present a member, and Prof. E. S. Wood, of the Harvard Medical School, have recently received the honorary diploma of the Société d'Hygiène de Paris, in acknowledgment of their services in sanitary medicine.

The high temperature which prevailed during the latter part of July showed its customary results in a large augmentation of the mortality from diarrhoeal disorders among young children. It is pleasant, in this connection, to note the good work accomplished in a quiet way and at comparatively little expense by the Sea-Shore Home, an institution located at Winthrop, a little to the north of the city. The children of the poor, especially those suffering from enteritis and cholera infantum, may be sent by the dispensary physicians to this home. Nursing mothers are also received with their children. The treatment consists, of course, chiefly in securing proper food, and the tonic influences of the Atlantic Ocean do the rest. Last year one hundred and thirty-five children, comprising, as a rule, the sickest cases to be found in the dispensary districts, were received, and there were only two deaths, one being from heart-disease and the other from ecthyma. Rev. E. E. Hale, who is the president of the board of officers, urged in his last report that the city government utilize the steamer which makes daily trips to the public institutions situated on some of the islands in the harbor, to take, on the recommendation of the city physician, such sick children as would be likely to be benefited by a few hours' sail. This recommendation, as its maker foresaw would be likely to be the case, from requiring the co-operation of several distinct boards, has not been carried into effect. Meantime, the other philanthropic enterprises which do so much to mitigate the sufferings of the poor and the sick during the midsummer heats, such as the "Country Week," the Flower Mission, the Poor Children's Excursions, and the Free Rides for Invalids, are being well supported.

C. F. W.

WASHINGTON.

MIDSUMMER DULNESS—THE WALES COURT-MARTIAL—THE AMERICAN PUBLIC HEALTH ASSOCIATION.

WASHINGTON, August 13, 1885.

IN midsummer the capital of the nation is very quiet, even dull. Everybody who can get away leaves the city, and, as its business depends largely upon the official class, who are mostly out of town when the administration is taking its summer vacation, news of all kinds is excessively scarce. Professionally very little is doing, and almost the only disease the doctors have to treat is Washington malaria.

The verdict of the court-martial in the case of ex-Surgeon-General Wales has, however, caused somewhat of a sensation. It will be remembered that Dr. Wales was tried by court-martial and found guilty of inefficiency and neglect of duty because he failed to discover the rascality of several of his clerks, by which the government was swindled out of a large amount of money, said to be over a hundred thousand dollars. The court failed to connect Dr. Wales with any of the frauds, but convicted him on a technicality, and imposed what is considered here a very severe penalty, out of all proportion to the offence. The high professional character of the late Surgeon-General, and his successful labors for the advancement of the medical staff of the navy, did not avail him; in fact, they seemed to render his offence the greater in the eyes of the court, which apparently held the opinion that the duties of the Surgeon-General were simply to watch his subordinates and prevent their stealing.

It seems by the confession of the principal criminal, the late chief clerk of the Bureau of Medicine and Surgery, that the frauds had gone on undetected for years under Dr. Wales's predecessors; but the court refused to go into the inquiry further than concerned the latter's administration. To outsiders it looks very much as if Dr. Wales were the victim of a systematic persecution, of which the late Secretary of the Navy was the chief promoter. It is well known here that there was a violent personal antipathy between the two men, which may have been partly political, but is believed to have largely arisen from social antagonisms. The penalty imposed by the court is suspension from rank and duty for a period of five years. It is said that Dr. Wales's counsel will not rest satisfied with this verdict, but will appeal the case to the Supreme Court.

The next annual meeting of the American Public Health Association will be held here during the second week in December. Dr. Smith Townsend, the health officer of the District, is chairman of the committee of arrangements, and has already appointed his subordinate committees. A good hall has been secured in a central and easily accessible location, and other measures have been

taken which promise to make the meeting one of the most successful that has ever been held.

G. H. R.

PROCEEDINGS OF SOCIETIES.

BRITISH MEDICAL ASSOCIATION MEETING—ABSTRACTS OF THE ADDRESSES.*

THE Fifty-third Annual Meeting of the British Medical Association was opened on Tuesday, July 28, at Cardiff, South Wales.

Thirty-two years had elapsed since the Association last met in Wales, and the members remarked with pleasure upon the "almost American speed of progress" exhibited by the Welsh city during the intervening period. From 1800 at the beginning of the century, and 10,000 in 1841, the population had grown to 86,000 in 1881, and 100,000 in 1885. This is due to the enterprise of the Marquis of Bute and the development of the great coal-fields of South Wales.

During the same period the membership of the Association had increased from eighteen hundred to over eleven thousand, while its financial condition may be judged by the marked favor with which the assembly received a proposition to expend at least one hundred thousand dollars in the erection of suitable buildings to accommodate the business of the Association in London.

The attendance this year was large, the meetings fairly harmonious, the arrangements admirably designed and carried out, and the pleasure of the members still further enhanced by the fine weather which prevailed during the convocation.

The opening address was delivered by the President, Dr. W. T. Roberts, of Cardiff. Our own Association might with propriety adopt the graceful custom of electing as President the nominee of the local society in whose district the annual meeting is held.

After extending a hearty welcome to the visitors, Dr. Roberts gave an interesting sketch of Cardiff and vicinity, touching upon its history, the objects of interest to be seen, and adverting to its remarkable growth. The increase in material prosperity has brought with it an increase in the consequent dangers. The important trade carried on between this city and the Spanish ports exposes it to the cholera epidemic now desolating the Iberian peninsula. The great importance of sanitary science and the happy results of its intelligent application he insisted upon, while the lay Boards of Health came in for some well-merited abuse. Speaking of education, the President regrets that Cardiff (a town ranking with Scranton) has no medical college of her own! Following this comes the usual retrospect of the advances in modern medi-

* Taken mainly from the report published in the *British Medical Journal*.

cal science, the speaker confining himself strictly to the beaten track, using the regulation illustrations,—anæsthetics, instruments of precision, the microscope, etc.

The topics discussed in such addresses are too well worn to allow of much variety in the subject-matter, but Dr. Roberts succeeded in presenting them in a more acceptable manner than usual.

The Address in Therapeutics was delivered by Prof. W. Roberts, of Victoria University. Recognizing the impossibility of dealing adequately with the entire subject in an hour's address, the speaker wisely confined his remarks to the single topic of Dietsetics.

Of all the duties devolving upon the physician, none are so common as that of regulating the diet of his patients. Perhaps it is because the duty *is* so common that so little systematic study is given to it. Most physicians end by adopting their own digestive status as the norm to which that of their patients ought to conform.

Instead of basing our ideas exclusively upon the results of studies upon the physiology of digestion and nutrition, we should start from observations on the habits of mankind, especially of those races whose success in the battle of life has been most decided. Hence the diet which natural selection has approved the best is that of the wealthier classes of Western Europe, including the use of cereals, legumens, fresh vegetables and fruit, animal foods, and the systematic consumption of alcoholic beverages, tea, coffee, and cocoa.

Individual peculiarities must modify this broad principle, and the extremes of life furnish exceptions so general as to constitute a second rule.

Sex also must be considered, women consuming less meat, less alcohol, and more bread and tea than do men.

The speaker lays down the law that we must not depart from the general dietetic customs of the country without the clearest proof of necessity, holding that the persistent use of alcohol, for instance, is conclusive proof of its utility, though we, in our ignorance, may be unable to specify it with precision.

He divides sick-diets into two classes,—as the subjects can or cannot partake of solid food.

In the first class he advises that the usual diet of health be not altered needlessly, forbidding injurious articles only, and allowing the numberless variations which characterize the diet of the most successful classes. We should lessen the amount rather than forbid utterly the use of customary viands. Fruit and vegetables should rarely be tabooed.

Dr. Roberts gives the results of some experiments upon the effects of the common beverages upon digestion. Strong liquors had little effect in retarding salivary or peptic digestion,

if diluted to the usual degree, unless in intoxicating doses. They stimulate the secretion of digestive juices and increase the muscular activity of the stomach. Wines interfere with salivary digestion unless neutralized by alkalies, such as Seltzer. All wines interfere with peptic digestion, although they stimulate the secretion of gastric juice and the contractions of the muscular walls of the stomach. Champagne is less injurious than still wines, from the mechanical action of the gas which permeates the food-mass. Tea completely inhibits salivary digestion in any strength. This action is due to the tannin, and no method of preparation gets rid of this objectionable ingredient. Coffee and cocoa do not affect salivary action. It is best for tea-drinkers to eat first, and only partake of the cheering cup before rising from the table. This also insures thorough mastication and insalivation.

On peptic digestion the effects of tea, coffee, and cocoa are the same. All three retarded it, if the proportion of the beverage in the digestive mixture exceeded twenty per cent. of a five-per-cent. preparation.

For the second class the foods recommended are peptonized milk, cold-made meat-infusions, beaten eggs, and gruels fortified by the addition of one-eighth the weight of ground malt. So completely has beef-tea fallen from its high estate that it is recommended to use the remnant of meat-fibre which was formerly thrown away, but which is now to be beaten into a paste, flavored, and eaten.

Instead of the proprietary articles known as infants' and invalids' foods, of unknown composition, it is recommended that the medical attendant shall make up foods to suit his cases, mingling wheat, oat, barley, maize, or lentil flour with malt, as he sees fit, with soda, pancreatin, or pepsin, as may be needed, and to be prepared under his personal supervision.

Dr. T. J. Dyke, Medical Officer of Health for Merthyr-Tydfil, delivered the Address in Public Medicine.

He gave a very succinct account of this parish,—its rise as a coal-producing district, and its sanitary history. In 1849 it had no drainage, no water-works, no provision for the removal of garbage or excrement. The death-rate was 332 per 10,000; that of children under one year, 80½.

In 1850 a Board of Health was formed; paving, drainage, the removal of house-refuse, and the provision of an adequate water-supply were gradually accomplished. By thirty years of sanitary work the death-rate has been reduced to 232 per 10,000; that of infants to 50; that from phthisis from 38 to 18½. Still, the death-rate remains high. Much of this is due to the cold, wet climate, and to the hardships incident to the miner's life, which predisposes to catarrhal affections.

The sewage of the city is disinfected by being diffused over four hundred acres of

land, prepared after Dr. Frankland's method. The effect is that water flowing from this filtration-area is purer than the Thames water supplied to London for drinking.

The water-supply of Merthyr-Tydfil is not yet free from impurity, and Dr. Dyke recommends that it be passed through filters of unglazed porcelain at the source of supply, and, to prevent any subsequent pollution, that the water be not allowed to come in contact with the air again until drawn from the house-tap.

The sewers are ventilated on the same plan as is used in the ventilation of mines. Shafts thirty feet high were built at the summits of main sewers for the outlet of sewer-gases, while at the lowest point of each sewer ventilated an inlet was provided for fresh air. This plan proved effectual.

The Section of Medicine was opened with an address by its President, Dr. Samuel Wilks.

After alluding to the changes in medical methods, due to the prevalence of the germ theory, he touched upon the compensating actions of the vital organs in health and disease; abnormal growth of less vital parts; the varying and intermittent activity of organs, their condition during sleep; and the repair of destructive action by the production of new tissue of the lower grades.

The Section of Surgery was opened with an address by Prof. E. H. Bennett, of Trinity College, Dublin. His remarks were confined to the subject which engrosses most of his attention,—injuries to the skeleton.

At the outset he deprecates the study of rare forms of injury, and urges the collection of large numbers of cases of ordinary injury. As an example, he referred to his collection of 100 specimens of Colles's fracture, of which 48 bore evidences of having been impacted, while 52 did not.

So also his extensive collection of fractured ribs shows that when broken by indirect force the fragments are never thrust outwards, though this is the common teaching.

A study of a number of fibulæ showed that fracture in the upper third was not an uncommon occurrence, though not noticed by Malgaigne or Pott. The cause is usually a sudden wrench when the foot is fully extended. Another injury which has escaped these acute observers, to be revealed by the method advocated, is that of oblique fracture of the metacarpal bone of the right thumb. It has probably been treated as a subluxation. It is caused by a fall. Pressure on the base of the bone readily elicits crepitus.

The Section on Obstetric Medicine was called to order by Henry Gervis, M.D., of St. Thomas's Hospital.

Speaking of the general lowering of the death-rate in England, he mentions that the deaths from puerperal fever fell from 60 per 100,000 in 1870 to 55 in 1876-1880. The decreased mortality he attributes to early use of the forceps, induction of premature labor

in deformed pelves, the better treatment of post-partum hemorrhage, and, greatest of all, the use of antiseptic methods after, and particularly during, labor. The more perfectly germs are excluded, the less will be the death-rate, while cleanliness, good surroundings, good health, etc., merely lessen the probability of infection and increase the patient's power of resistance.

He inculcates the necessity of washing the hands with carbolized water before making examinations, sponging out the vagina with the same preparation before and after the entrance of hand or instrument. In placenta prævia it is recommended to mop the uterine surface from which the placenta has been removed with perchloride of iron solution. In the management of the third stage Crédé's method is approved, from the antiseptic standpoint.

Careful inspection of the vulva should be made after every labor, and any tear, however slight, treated antiseptically. The cautious use of mercuric chloride solution, 1 to 2000, for irrigation, is recommended. Boracic acid, 10 gr. to the ounce, is said to be more soothing for the inflammation attendant upon lacerations.

The increased proportion of deaths from cancer is noted with regret. Early extirpation is urged, supported by many authorities, and to aid in the early diagnosis the use of the microscope is pressed. Dr. Gervis admits the heredity of cancer in a way which few would care to do at present. In claiming heredity and environment as the two ruling influences in the evolution of disease, we have another proof of the rapidity with which the system of Darwin is being adopted as the corner-stone of modern science.

The Section of Public Medicine was opened by an address from the President, Dr. David Davies, Medical Officer of Health for Bristol. The threatening aspect of the cholera-epidemic first engaged his attention.

It is greatly to be regretted that the disputes between the microscopists are still unsettled. However, this has not deterred the government from instituting a rigid inspection of vessels arriving from infected ports, nor from putting the exposed districts into the highest possible state of sanitation.

The serious detriment to the value of mortality records which results from the ignorance of those who sign them is acknowledged, but no means of remedying the evil are suggested, unless it be a return to the apprentice-system.

The suggestion was made that the interests of the public health should be upheld in Parliament by the appointment of a minister as head of the department.

Another pressing need of the profession is a government institution for conducting pathological and other investigations. Such an institution would be a most handsome ac-

knowledge of the brilliant work of Dr. Koch.

Dr. D. Yellowlees delivered the opening address to the Section of Psychology. He chose as his subject "The Causes and Prevention of Insanity."

The causes are divided into two groups: those arising from the conditions pertaining to the person, and those which come by inheritance. They often coexist, though the personal causes are often effective without the aid of inherited tendencies.

Injury, exhaustion, anæmia, or irritation of the brain due to disease of that organ or of other parts of the body may cause insanity in any individual without the aid of hereditary predisposition.

The speaker raises his voice in protest against the reckless disregard of the laws of brain-health shown in the rush and hurry of our modern high-pressure life. Even worse is the effect of alcohol and sexual excess, the tendency to which may be hereditary or acquired.

The emotional causes, in most cases, are effective only where the nervous predisposition is inherited.

This predisposition may never be developed into insanity, or it may show itself in paralysis, epilepsy, neuralgia, asthma, diabetes, hysteria, chorea, drunkenness, crime, or genius. Persons thus predisposed should be assured that these affections are by no means inevitable; but they should sedulously avoid the exciting causes and keep themselves in good general health. Overwork of the brain must be tabooed vigorously, frequent holidays taken, a mild country life, due exercise, and plenty of sleep.

The ranks of the insane are recruited from the untrained and ill-balanced, whose emotions are not subdued by wise self-control and habitual moderation. Injury is inflicted on many by the Procrustean bed of the public school, where all brains are expected to absorb the same daily dose of facts.

Especially with girls of the better class is the evil of our educational system shown. With their minds stuffed with all useless knowledge, marriage finds them ignorant of the duties of a wife, a mother, or of the mistress of a household. The question of marriage in those predisposed to neurotic disease is a most vital one. If the mate chosen be of well-balanced mind and free from neurotic tendencies, all may be well. But these people gravitate towards each other singularly, and, as the choice is made by feeling and not by deliberate judgment, our counsels are usually disregarded. Finally, as the greatest of safeguards comes the faith of the Christian in the unseen God. If melancholy takes a religious dress, the symptom is often supposed to be the cause, and the case is erroneously called religious insanity. Religious excitement in emotional persons cer-

tainly does sometimes produce emotional insanity; but generally this follows views so distorted from true religion as to be but a libel on its name, while "there is no security for conduct, no strength for duty, no support in sorrow, to be compared to that which true religion affords."

The President of the Section of Ophthalmology and Otology, Dr. Henry Power, delivered an address on Progress in Ophthalmology.

The first English work published on the eye was by Richard Banister, in 1586. The contrast with the cyclopædic works of Graefe and Saemisch is striking. The development of the specialty has been such as to create sub-specialties within it. More than ever is it necessary that, before beginning the work of a specialist, the possession of a broad knowledge of medicine and surgery should be acquired by years of public and private practice.

Among the recent advances in this special province the first mention is made of Dr. McKeown's efforts to lessen the prevalence of ophthalmia neonatorum by instructing the laity as to its nature and treatment.

Speaking of new remedies, jequirity and duboisin are disapproved of, eserine and homatropin received with favor.

Cocaine inaugurates a new era. The speaker omitted, however, to mention the secondary dilatation of the vessels caused by it, and also the occasional occurrence of panophthalmitis after its use.

The researches of Hoeltzki show that eserine causes a primary increase and subsequent reduction of the intraocular tension, while atropine produces precisely the opposite effect.

The action of iodoform in acute inflammations is praised.

The opening address in the Section of Pharmacology and Therapeutics was delivered by Professor Fraser, of Edinburgh. After sketching the rise and progress of the art, the speaker emphasized the distinction between observations in health and in disease.

The progress of pathology has not as yet contributed conspicuously to that of therapeutics, though in many cases the therapeutical uses of agents still await the explanation which can only be afforded by an advance in pathology.

Two methods of study, he said, are open to us. The first, observation of the effects of remedies in disease, is open to so many sources of error that centuries of labor have produced little unquestionable result. But where pathology has revealed the essential nature of disease, pharmacology must produce the remedy. The facts added by this means to our stock are of peculiar value, because they are based on indisputable evidence. Vivisection should be continued, as the only means whereby therapeutics can be established on a sure foundation.

Professor Fraser further recommends that in the schools pharmacology should be severed from materia medica and pharmacy, and should be taught in the final years of the course. It might be conjoined with therapeutics, mainly for the purpose of emphasizing the distinction between them.

NEW YORK PATHOLOGICAL SOCIETY.

A STATED meeting was held June 24, 1885, the President, JOHN A. WYETH, M.D., in the chair.

CONGENITAL LIPOMA OR CIRCUMSCRIBED ELEPHANTIASIS.

Dr. A. JACOBI presented a child aged eight months, whose mother was sixteen years old. The child at birth had a tumor on the outer aspect of the lower third of the leg, which at the present date was a little larger, and measured about five centimetres in its longitudinal diameter, and extended about a third of the distance around the leg. It was soft; the skin seemed thickened and could not be lifted above the mass, whose surface was slightly above that of the surrounding tissue. The diagnosis lay between congenital lipoma and congenital circumscribed elephantiasis. The tumor was not encapsulated nor lobulated. A positive diagnosis would probably be reached should he have an opportunity to examine a part of the tumor under the microscope.

The PRESIDENT asked if it might not be a congenital sarcoma. He had seen one case of congenital sarcoma, occurring in a boy, who had a small apparent reduplication of the skin on the chin, which after a year and a half grew rapidly, and the child died, when past two years of age, of an enormous sarcomatous growth.

Dr. JACOBI thought the peculiarities which we would expect to see in a sarcomatous tumor would now be apparent, were this a case of that disease.

ELEVEN CASES OF TAIT'S OPERATION.

Dr. W. GILL WYLIE presented another series of eleven specimens of Tait's operation, supplementary to a series of fourteen presented at a meeting in January last. The histories of the specimens were very similar. One patient died, it being a hospital case, the sponges which had come in contact with the contents of the cyst having inadvertently been used for wiping out the peritoneal cavity, leading to septic poisoning. The greatest care was taken to use clean instruments, sponges, etc. As few hands as possible were allowed to enter the peritoneal cavity. The wound in the abdominal walls was as small as was compatible with a safe operation. The patients were under observation for some weeks, some for months, and some for over a year before the operation was undertaken. Nearly all were bedridden,—had had local

inflammation and peritonitis. In reply to a question by Dr. Amidon, he said one-fourth or one-third were hysterical. He further said that hysteria was liable to be present in cases of deep-seated cyst of the ovaries. He was losing faith in the so-called ovarian dysmenorrhœa. This trouble was usually due to hyperæsthesia and more or less contraction at the os internum.

The PRESIDENT had become impressed with the importance of two facts in abdominal surgery,—namely, careful cleansing of the peritoneal cavity of all septic matter, and establishing free drainage during the healing process. He had been taught that rupture of the bladder with escape of urine into the peritoneal cavity was sure death, but he had seen one such case in which recovery took place after washing the peritoneal cavity with bichloride solution. In a case of cysts whose contents spilled into the peritoneal cavity, the cavity was flooded two or three times with a weak bichloride solution and sepsis was prevented.

PERINEAL SECTION AND INTERNAL URETHROTOMY FOR STRICTURE AND URINARY FISTULÆ.

Dr. C. H. KNIGHT presented the bladder and penis removed from the body of a man 40 years of age, who died from poisoning by cyanide of potassium. Twelve years ago he had gonorrhœa, and a second attack two years later. Stricture developed, for which he used a sound for many years; there also appeared urinary fistulæ in the perineum, for which he received no treatment until they were divided by Dr. Knight in 1883, at the same time performing internal urethrotomy. Urine ceased to pass by the fistulæ almost altogether after the operation. The sounds were passed for some time. The patient afterwards fell, and as a result a perineal abscess developed, and this was followed by a renewal of the fistulæ. The operation of division and of further enlargement of the urethra with the urethrotome was repeated, and after healing of the wounds no urine escaped by the fistulæ for five weeks, when a slight dribbling occurred. Shortly afterwards he committed suicide.

At the autopsy the posterior portion of the urethra showed an abscess-cavity capable of containing about two drachms. In the immediate neighborhood were four fistulæ, the largest of which readily admitted a 28 sound. The bladder-walls were much thickened, and the capacity of the organ markedly diminished. The appearance of the urethra led him to think the fistulæ resulted from rough usage during the passage of sounds.

RECURRENT FIBRO-SARCOMA OF THE NASOPHARYNGEAL SPACE.

Dr. R. P. LINCOLN presented a large fibro-sarcoma removed by the galvano-cautery écraseur from its attachment to the naso-

pharynx in a boy of 17. A like tumor, of less size and vascularity, was removed in the same manner about eleven months ago. The patient failed to keep his promise to return and allow of repeated cauterizations of the base, and consequently the present large tumor developed. The case showed the necessity for following up the operation of removal by cauterizations of the base of the growth.

FRACTURE OF THE OCCIPITAL BONE.

Dr. W. P. WATSON presented the occipital bone of a young man who was supposed to have sustained an injury of the head by a stone while out "skylarking." The three following days he was able to work, but on the evening of the third day complained of headache, went to bed, and sent for a physician, who found him unconscious. The clinical history was incomplete, but it was said there was copious hemorrhage from the nose a few hours before death, which took place some days later. The autopsy showed a contusion near the occipital protuberance, a fracture of the bone extending on the right side into the foramen magnum, and on the left side a shorter distance. There was congestion of the surface of the brain.

Dr. VAN SANTVOORD had made a number of autopsies in cases of fracture of the skull, and had found that fracture without surface-hemorrhage on the brain seemed innocuous.

Dr. WYLIE said a student from the South had received an injury of the head, had hemorrhage from the ears and pharynx, and serous discharge from the ears for ten days afterwards. There were no other symptoms, and the man got well without special treatment.

The PRESIDENT said there was a skull in Wood's Museum which belonged to a seaman who fell a distance of twenty feet, striking on the buttock, and the only injury seen after death existed in the base of the skull, which had sustained twelve fractures from displacement of the spinal column upward.

ULCERATION OF THE VOCAL CORDS.

Dr. VAN SANTVOORD presented the larynx in which the vocal cords had become markedly ulcerated during the course of measles. The child suffered from a pharyngitis and broncho-pneumonia developing in the course of the exanthematous disease. While he had not made it a custom to examine the vocal cords in children dying during the course of measles unless there were symptoms pointing specially to disease of them, he had not supposed that ulceration of the cords was common. He was therefore surprised to learn, on studying the literature of the subject, that this complication was very frequent.

DIFFUSE FATTY DEGENERATION OF THE HEART, WITH CONCENTRIC HYPERTROPHY OF THE LEFT VENTRICLE AND MITRAL STENOSIS.

Dr. J. H. RIPLEY presented the specimen.

The man was 67 years of age, and a year ago weighed two hundred pounds. He had scarcely had any sickness until July, 1884; had never had rheumatism nor syphilis. In August he had an attack of diarrhoea with pain. Dr. Ripley saw him about two weeks later, when the diarrhoea had ceased and he was suffering from pain in the region of the liver. The temperature was 101°. One symptom struck him forcibly,—namely, the abnormal heart-action. It beat about one hundred and sixty times per minute, was very feeble and irregular. The area of hepatic dulness extended four inches below the free border of the ribs. There was tumescence of the veins of the neck and œdema at the base of the lungs. Acute perihepatitis was diagnosed. The acute symptoms subsided at the end of a week. The dropsy increased, fluid accumulated in the pleural and peritoneal cavities, and general anasarca developed. In November Dr. Ripley punctured the cellular tissue, and large quantities of fluid drained away. The pulse, however, continued rapid and feeble, and the patient suffered from dyspnoea and anorexia.

Dr. Ripley diagnosed fatty degeneration of the heart. For some time no cardiac murmur could be discovered. Finally, however, one became perceptible at the apex, and still later one at the base of the heart. Dr. Ripley discontinued his visits about the 1st of January, although there still remained some dropsy. Later he grew worse, and an irregular practitioner attended him until death. It was understood that hypercatharsis was produced for general dropsy. The patient weighed but one hundred and forty pounds. The skin was all the time of a yellowish color.

At the autopsy, besides general dropsy and fluid in the serous cavities, the liver was found considerably enlarged, its capsule thickened, and had the appearance of the nutmeg-liver; the kidneys were covered with an unusual quantity of fat, the capsule adherent, the cortical portion thickened; the spleen the size of a pullet's egg; the lungs carnified at the base; there were old pleuritic adhesions; the pericardium contained much fat; the aortic valves were thickened and shrunken; the mitral valve was insufficient; the walls of the left ventricle much thickened and its cavity greatly diminished, constituting concentric hypertrophy. Microscopic examination showed marked fatty degeneration of the walls of all the cavities of the heart, particularly of the right ventricle. There was hardly any atheroma of the arteries.

Dr. Ripley said it was stated that in fatty degeneration of the heart the walls of the left ventricle were usually more implicated than those of the right. In the present case the right ventricle had undergone fatty change to greater extent than the left. While fatty degeneration of the heart was common, its

clinical history had not been much written up, and for that reason he thought this case interesting. The great rapidity of the pulse, sometimes two hundred per minute, its feebleness and irregularity, were striking features in the clinical history of the case.

Dr. VAN SANTVOORD and Dr. JACOBI thought it generally stated that fatty degeneration was usually more marked in the right than in the left side of the heart.

PATHOLOGICAL SOCIETY OF PHILADELPHIA.

STATED MEETING, JUNE 25, 1885.

The President, E. O. SHAKESPEARE, M.D., in the chair.

DR. WM. OSLER exhibited for Dr. McLAREN, of Paisley, Ontario, some specimens, which he had sent him, of hydatids passed with the urine, with the following history, dated April 13, 1885:

The patient, Geo. S., aged 58, an Englishman, resident of Ontario for thirty-five years, at present a farmer, but formerly a butcher for fifteen years. Always enjoyed good health until about four years ago, when he had a severe attack of nephritic colic on the right side, lasting only a short time and quickly relieved. Had no further trouble until two years afterwards, when a similar attack occurred, confining him to bed for several weeks; some days he was better, but always worse on exertion. After a period of improvement for several weeks, during which time he was able to attend to his farm duties, he felt pain and uneasiness over the right kidney, followed in a day or two by pain at the point of the penis, which continued for several hours and was relieved by the passage of gelatinous-looking masses in the urine. These bodies—hydatids—he has continued to pass at intervals of from two to four weeks. The discharge is always preceded by an uncomfortable feeling of fullness in the region of the kidney and pain or uneasy sensations at the penis. No tumor has at any time been discovered in the neighborhood of the kidney. With the exception of these attacks of pain and distress in the urinary organs prior to the discharge of the hydatids, he enjoys good health. He lost no weight; appetite good; bowels regular.

The specimens, which were given to me for examination by Dr. Palmer Howard, of Montreal, consisted of ten or a dozen hydatid cysts, ranging in size from a pea to a grape, and contained in a small quantity of urine. They were evidently the daughter-cysts of a larger one which was in communication with the urinary passages. Several of the cysts contained smaller ones (granddaughter-cysts). On examination of a drop of the urine in which they were, numerous hydatids and the characteristic hooklets could be seen.

Echinococcus of the kidney or urinary passages is very uncommon. Statistics show that the left organ is more frequently affected than the right. The points of interest in this case are: the long duration, the absence of evident tumor, and the excellent condition of the patient. Here is evidently a cyst of considerable size, possibly in the right kidney, and which bursts at times into the pelvis with the discharge of the hydatids.

In 1882 Dr. Osler had reviewed the literature of American cases of echinococcus disease, and had made inquiries of the curators of the principal museums, the result of which was the collection of sixty-one instances of the disease (*Am. Jour. Med. Sci.*, 1862). In not one of these was the cyst in the kidney. Since that date six other cases have been reported by Carson (*St. Louis Courier*, 1884), cyst of liver; Schæffer (liver), *Trans. Med. Soc. Penn.*, 1884; liver (liver and mesentery), *N. Y. Med. Journal*, 1885; Helen, *New Eng. Med. Journal*, 1883-4, cyst of liver, ruptured into intestine; Welsh, spleen, *Med. News*, 1884.

Dr. MORRIS LONGSTRETH exhibited a series of six specimens of echinococci situated in various organs. Owing, however, to the notes not having been forwarded to the Recorder, no details can be given.

Dr. J. H. MUSSEY presented the following specimens: melanotic sarcoma, acute suppurative pancreatitis, thrombosis of portal vein, cirrhosis of the liver, and syphilitic (?) disease of the lung.

Dr. J. R. MITCHELL presented a specimen of carcinoma of the peritoneum, liver, and pancreas. The details will be published at a future time.

Dr. C. B. NANCREDE presented a specimen of suppurating hæmatocele, which he had that day removed by castration from the person of a patient 74 years of age. It presented some points of interest, which were dwelt upon by the exhibitor.

Dr. FORMAD presented a specimen of supposed typhoid lesions in a child 15 months old. There was no history, as it was a coroner's case.

REVIEWS AND BOOK NOTICES.

ANNUAL REPORT OF THE SECRETARY OF THE NAVY FOR THE YEAR 1884.

REPORT OF THE SURGEON-GENERAL OF THE NAVY FOR THE YEAR 1883.

The Report of the Surgeon-General of the Navy for 1883 is, like its predecessors, a valuable and interesting work. There is in the last report much to attract the attention of the medical profession, outside of the usual information furnished in these volumes. The importance of maintaining the few naval hospitals belonging to the government cannot

be overestimated, and the recommendations of the Surgeon-General deserve prompt approval. The establishment of the quarantine-station at Portsmouth, New Hampshire, and the practical recommendations relating thereto, are deserving of praise. The report concerning the Museum of Hygiene shows that institution to be in a prosperous condition. The collection, numbering six hundred and fifty articles, consists of articles, plans, etc., arranged under the divisions of "hygiene of civil life," "hygiene of private life," and "military and naval hygiene." The volumes in the library now number seven thousand and forty-nine. The experimental laboratory connected with the Museum has all requisite apparatus for work, both in organic and inorganic chemistry; also apparatus designed for special investigation, as Koch's for germ-culture, Hemple's gas apparatus, Winkler's gas apparatus, and that of J. Burdon-Sanderson for physiological experiments, together with the spectroscope, polariscope, photometer, and other special instruments. The enumerated articles, except that of Burdon-Sanderson, have been recently received.

"Connected with the laboratory is the division of microscopy, which is essentially complete in outfit. Photomicrographic work, as well as ordinary photography, can be done with complete apparatus."

All this goes to prove the high scientific standard of the Medical Corps of the United States Navy. The history of the statistical reports of the Bureau of Medicine and Surgery is given. Surgeon T. J. Turner prepared, in 1870, the first form of statistical reports, with accompanying sanitary notes, for Dr. William M. Wood, the first Surgeon-General of the Navy, and the admirable form then originated has been employed in subsequent reports.

The plan for post-graduate instruction for naval medical officers, and the necessity for strict attention to the ever-advancing science of medicine, must meet with the approval of the profession, and, it is to be hoped, will be favorably considered by the Secretary of the Navy, and carried out as suggested.

Valuable and instructive reports are contributed by Medical Inspector Bates, on the "Medical History of Japan," by Surgeon George W. Woods, on the "Chief Commercial Ports of India," and by Medical Director Browne, on the "Condition of the Famous Naval Medical School at Haslar, England." Passed Assistant-Surgeon Herndon furnishes a very interesting report of the United States Fish Commission steamer "Albatross." "The Cruise of the 'Juniata,'" by Surgeon George W. Woods, is another interesting paper, placing the profession twice in his debt in this one volume. The section relating to *Persia* is particularly instructive. Surgeon Wise contributes a "Sanitary Report concerning the School-Ship 'New Hampshire.'" W. T. P.

TRANSACTIONS OF THE MEDICAL SOCIETY OF WEST VIRGINIA, EIGHTEENTH ANNUAL SESSION. Held at Weston, May 20 and 21, 1885.

This volume of Transactions, which should have had an index, contains a masterly annual address by the President of the Society, George Baird, M.D., of Wheeling, in which the prospect of an epidemic invasion of Asiatic cholera, and the steps to be taken to reduce its virulence, the establishment of a Department of Health as one of the departments of the general government, its presiding officer to have the same privileges as other cabinet officers, the dangers of druggists prescribing for the sick, the importance of the work done by State Boards of Health and Vital Statistics, specialism, quackery in the profession, the anti-vaccination action of the Legislature, the resignation of Dr. Reeves, and other timely topics, are intelligently and ably treated.

The papers read were not numerous, but are interesting and valuable contributions. Dr. John L. Dickey, of Wheeling, read a brief but comprehensive communication on the "Errors of Refraction;" Dr. John Frisell contributed "A Few Thoughts on Blood-Letting and the Use of Forceps in Cases of Labor," approving the former and discouraging the use of the latter; Dr. F. Howell, of Clarksburg, recommended "Carbolized Catgut Ligature in Divided Tendons;" Dr. D. Porter Morgan, of Clarksburg, discussed "Operations in Malignant Diseases," urging early operation; Dr. I. A. Harris, of Parkersburg, in a paper entitled "Mens Sana in Corpore Sano," proposes hygienic measures to prevent nervous disorders, and advocates separate hospitals for the curable insane; Dr. C. C. Hersman, from his experience, discourages the use of "Paraldehyde as a Hypnotic;" Dr. T. R. Evans, of Nuttallsburg, reviews the "Signs of Impending Death;" the whole concluding with the report of a committee appointed to consider the remarkable utterances before the State Legislature of Mr. H. C. McWhorter on the subject of vaccination. These papers, which are unusually readable, are not accompanied by reports of discussions.

A SYSTEM OF PRACTICAL MEDICINE BY AMERICAN AUTHORS. Edited by WILLIAM PEPPER, M.D., LL.D., assisted by LOUIS STARR, M.D. Vol. II.—GENERAL DISEASES (Continued), AND DISEASES OF THE DIGESTIVE SYSTEM. Lea Bros. & Co., 1885. Pp. 1194, index pp. 118.

The second volume of this "System of Practical Medicine by American Authors" fully maintains the standard established by the first volume, which has been so favorably received by the profession both abroad and at home. The General Diseases considered are Rheumatism, Gout, Rachitis, Scurvy, Purpura, Diabetes Mellitus, Scrofula, and Hereditary Syphilis. The Diseases of the Di-

gestive System are systematically discussed under the titles of Diseases of the Mouth and Tongue, Tonsils, Pharynx, and Oesophagus; Functional and Inflammatory Diseases of the Stomach; Simple Ulcer and Cancer of the Stomach; Hemorrhage, Dilatation, and Minor Affections of the Stomach; Intestinal Indigestion, Constipation, Enteralgia, Acute and Chronic Intestinal Catarrh; Cholera Morbus; Intestinal Affections of Children in Hot Weather; Pseudo-Membranous Enteritis, Dysentery; Typhlitis, Perityphlitis, and Paratyphlitis; Intestinal Ulcer; Hemorrhage from the Bowels; Intestinal Obstruction; Cancer and Lardaceous Degeneration of the Intestine; Diseases of the Rectum and Anus; Intestinal Worms, Diseases of the Liver, Diseases of the Pancreas; Peritonitis, and Diseases of the Abdominal Glands (Tabes Mesenterica).

The contributors to this volume are twenty-two in number, and among them are recognized some of the principal authorities in this country upon the diseases they treat of. The principal articles are those by Dr. Roberts Bartholow, on "Diseases of the Liver;" Dr. Thomas G. Morton, assisted by H. M. Wetherill, on "Diseases of the Rectum and Anus;" Dr. J. Lewis Smith, on "Intestinal Affections of Children during Hot Weather;" Dr. R. Palmer Howard, on "Rheumatism;" and the series of articles by J. Solis Cohen, W. H. Welch, J. T. Whittaker, W. W. Johnston, and Hunter McGuire.

The publishers deserve to be congratulated upon the handsome appearance and substantial binding of this valuable work of reference.

HAY-FEVER AND ITS SUCCESSFUL TREATMENT BY SUPERFICIAL ORGANIC ALTERATION OF THE NASAL MUCOUS MEMBRANE. An Essay read before the Philadelphia Laryngological Society, April 24, 1885, by CHARLES E. SAJOUS, M.D. Illustrated with Thirteen Wood-Engravings. Philadelphia, F. A. Davis, Att'y, 1885. 12mo, cloth, pp. 103.

This essay merits the handsome dress in which it is presented. Several members of the American Laryngological Society—Drs. Daly, Roe, Shurly, McKenzie, Allen, Jarvis, and Sajous—had been for two years or more teaching the doctrine that hay-fever is essentially a neurosis dependent upon local conditions in the nasal passages, and various methods—cauterization by acids, by the actual cautery or galvanic loop, and removal of hypertrophies—have been practised successfully.

Dr. Sajous claims originality in his teaching as to the relation between local changes in the upper air-passages and hay-fever, and priority in demonstrating the actual practical value of superficial organic alteration of the nasal mucous membrane as a remedy for the disease. The results reported from the method described in the monograph fully establish its claim to its title.

A PRACTICAL TREATISE ON URINARY AND RENAL DISEASES, INCLUDING URINARY DEPOSITS. Illustrated by Numerous Cases and Engravings. By WILLIAM ROBERTS, M.D., F.R.S., assisted by ROBERT MCGUIRE, M.D. Lond. Fourth Edition. Philadelphia, Lea Bros. & Co. Cloth, 8vo, pp. 628.

The third edition of this well-known textbook on urinary disorders has been out of print for some years, during which time the work has undergone a thorough revision, and some of the articles have been rewritten. Much new matter has been introduced with regard to Bright's disease, and recent observations of micro-organisms included. The work is written particularly from a clinical stand-point, and its recommendations for treatment seem judicious and sound. A good bibliography is appended, besides the usual index and table of contents. It is well printed, and the illustrations are very good.

NOBLE DEEDS OF THE GREAT AND BRAVE, GATHERED FROM MANY AGES AND NATIONS. By R. S. HARTZELL. With an Introduction by REV. HERBERT N. MORRIS, D.D. Attractively illustrated. Henry L. Warren & Co., Philadelphia, 1884. Published by subscription. Cloth, embossed, 8vo, pp. 512.

This handsomely-bound, clearly-printed, and finely-illustrated book contains, in its ten parts, illustrious and classical examples, culled from history and song, of grand achievements, heroic sacrifices, valiant exploits, knightly virtues, patriotism, devotion to duty, and other magnanimous traits, as recorded by distinguished writers and poets ancient and modern. The compilation has been carefully and creditably made, and, while admirably designed as a gift-book to a child, it will serve as a work of reference for older readers.

HEALTH-HINTS FOR TRAVELLERS. By JOHN C. SUNDBERG, M.D. D. G. Brinton. 12mo, pp. 61.

The author of these hints is a traveller of experience, who has been both in hot and cold climates and has picked up a number of useful hints, which his medical knowledge has enabled him to arrange in a systematic way for the benefit of others. His own observation coincides with the views of Parkes, and more recently Stanley, as to the danger arising from the use of alcohol in hot climates.

LECTURES ON PHTHISIS PULMONALIS. By ERNEST L. SHURLY, M.D., etc. 12mo, paper, pp. 115.

These valuable lectures, reprinted from the *Medical Age*, epitomize recent knowledge upon the subject, including the newest details of diagnosis and treatment.

GLEANINGS FROM EXCHANGES.

RADICAL TREATMENT OF HERNIA.—Mr. John Wood, Hunterian Professor of Surgery and Pathology, has delivered three lectures before the Royal College of Surgeons upon "Hernia and its Radical Cure." His views upon operative treatment are summarized in the following conclusions:

It appears indubitable, from the results of the last twenty or more years' experience of the radical cure of hernia, that the position of those surgical writers who have maintained that the radical cure should not be attempted except in the severest cases is untenable. The operation has given as great relief and exemption from the minor troubles and worry which make life miserable as any operation associated with prolapse, such as hemorrhoids, and is even more safe. It is certainly quite as much called for, on the score of relief from pain and inconvenience, as most other abdominal operations. Though it may not, like ovariectomy, remove the certainty of a speedy death, and may, like colotomy, be called an operation of convenience or expediency, it often relieves suffering as severe as that for which colotomy is performed, and is attended by far happier results.

The justification of the operation being admitted, it remains to consider what cases are most appropriate for it, and which of the many we have passed in review is most proper and applicable for the cases chosen. The rules I have observed in my own cases have been as follows. The subcutaneous plan has been adopted:

1. In all cases of children above five years old, in whom trusses are useless and unavailable because of neglect, violent coughing and crying, sore groins, rapid increase in the size of the hernia, and interference with micturition.

2. In cases of young adults or boys under fourteen, whose prospects in life as candidates for the naval, military, or engineering professions, or for colonizing, are seriously impaired by the hernial condition. Such persons may be far from surgical assistance when the exigencies of duty or occupation may produce strangulation, or the breakage of a truss may leave them defenceless; they are subject, also, to increased life-assurance rates, from which the operation, when successful, relieves them. It should be done in able-bodied workmen generally, whose various laborious employments may place them continually in danger of strangulation, and whose strength and usefulness are impaired by the hernia. The extent of the necessity for a radical cure of hernia, and the patriotic and social motives which demand it, are clearly made manifest by the estimates of the number of recruits and conscripts rejected for this complaint. Malgaigne states

that one in every thirteen Frenchmen is ruptured; Arnaud, one in every eight. During the civil war in the United States, 38,132 were rejected in two years. In this country it is said that one in every twenty males is ruptured. The bodily ailments and mental worry which this condition and its consequences entail upon this large number of human beings make up a very impressive total of suffering. And the mortality from it must be also considered. In 1879, according to the Registrar-General's reports, as given by Dr. Spanton, no fewer than 1119 deaths occurred from hernia, of which 23.5 per cent. had undergone operation for strangulation, etc. The average rate of mortality of the operation of kelotomy in eleven large hospitals is given by the same author as 41.8 per cent. The proportion of the mortality from hernia increases with age to a marked degree. The importance of a permanent cure effected during youth for so large and useful a class as this, when thus viewed, rises to the point of a national demand.

3. In reducible cases, where the sac is thick and indurated from truss-pressure, or where the omentum is continually slipping down under the truss, showing thereby that it is abnormally elongated, I open the sac, tie the vessels of the omentum separately, and remove it below the ligatures; tie up the neck of the sac flush with the peritoneum at the deep hernial opening, and apply wire or tendon ligature to the canal and rings. When, from any cause, a first operation fails in effecting a satisfactory cure also, I open the sac, inspect its interior to discover any special cause for the failure, tie and remove the sac, and lace up the canal and rings with especial care and security.

4. In all favorable cases of strangulated hernia, both inguinal and crural, the coverings and front wall of the canal being necessarily divided to search for the constricting tissues, I open the sac, examine the contents, remove adhesions and doubtful portions of omentum, then tie up the neck of the sac, cut it off short, and remove it altogether (except in congenital hernia), and secure the walls of the canal and rings, as in the subcutaneous method. Of course, a wrong diagnosis of the condition of the bowel or omentum, and of their fitness to be returned into the abdomen, or some other cause arising from the strangulation, may, in these cases, result in a fatal issue. But I believe strongly that, if drainage be free and skilfully arranged, no increase of risk ensues from the attempt to produce a radical cure. Quite lately I have done this in a case of *reductio en bloc* in a man who is now convalescent in the hospital.

5. Cases of irreducible hernia and large and unmanageable cases of reducible hernia in patients otherwise in a good state of general health, and not above the age of sixty, and in which truss-pressure entirely fails to

render the patient comfortable and free from danger, seem to me to justify and to require operation, if the patient wish for the benefits which he may reasonably expect from a carefully-conducted operation under strict antiseptic methods. In all cases he should have the chances fairly laid before him in a way that he can understand, and then have the option without bias or persuasion.

In these cases, as in the last class, the operation necessarily assumes more or less of the character of an open operation under spray. The sac is freely opened, and is tied and removed, but the suturing of the canal and rings is effected as in the subcutaneous method.—*British Medical Journal*.

PERMANGANATE OF POTASSIUM AND ALCOHOL FOR SNAKE-BITE.—B. Hall Smith, M.D., in the *Atlanta Medical and Surgical Journal* (August), reports a case of rattlesnake-bite successfully treated with potassium permanganate and whiskey. The patient, an adult farmer, was found suffering with the combined effects of snake-venom and tobacco, an infusion of which had been administered by his friends. The punctures made by the fangs of the snake were laid open and cauterized by pure carbolic acid. As the stomach could not retain medicine, whiskey was given hypodermically into the leg or arm. The patient was greatly prostrated, there was excessive cardiac weakness, dilatation of the pupil, and he had every appearance of impending dissolution. The permanganate was given hypodermically (gr. 2½ in water f3ss) every twenty minutes, alternating with whiskey, and occasional doses of dilute spirits of ammonia administered in the same way. At the end of five hours' treatment the patient was thought to be dying, but several injections of whiskey and one of ether revived him, and at the end of two hours more he was considered out of danger. The treatment was successful in saving life, but it is difficult to decide just how much of the credit belongs to the permanganate and how much to the whiskey.

MISCELLANY.

AN ILLEGAL CONTRACT.—In the Michigan Supreme Court recently occurred a curious case, where the validity of an agreement between a physician and his patient as against a railroad company was in question. The physician, it appeared, had agreed to accompany the patient, who was injured by the defendant's cars, and explain to the lawyers and physicians employed by the company the character and extent of the injuries, receiving as compensation an amount to be determined by the sum awarded as damages. This agreement the court held to be illegal and void, though not on the ground that the injured

man got more than he ought to receive. This did not appear to be shown at all. The court decided the matter on entirely different grounds, which are fairly expressed by the following extracts from the opinion: "He [the physician] puts himself in a position where both parties are expected to rely on him and to act on what he says. When under such circumstances he makes the disclosure of his knowledge and opinions the subject of a contract, whereby his compensation is to depend on the amount obtained by his employer by reason of the disclosure, it is plain that he puts himself in a position where it is his interest to exaggerate. . . . And however honest a man's actual intentions may be, and however truthful he may be, there is a temptation to misrepresent, and a direct danger that the misrepresentation will operate injuriously to the parties dealt with."

ADULTERATED FOOD.—The Board of Health of New York City has been waging vigorous and very commendable warfare upon the manufacture and sale of adulterated articles, but occasionally it attempts methods which the courts do not altogether sanction. This appeared recently in the case of adulterated teas offered for sale, which were proved to be filthy and innutritious, the point at issue being whether they were sufficiently harmful to health to be the proper subject for an injunction forbidding their sale. This injunction was asked for, but denied, for the reason that the imminency of the danger was not so conclusively shown as to warrant the issuing of an injunction. The case was appealed to the Court of Appeals, and the decision was affirmed. The decision did not mean that the court was willing to favor the sale of adulterated articles, but that in the case at bar other legal remedies besides an injunction were at hand, and, in its opinion, a case was not made out for an injunction.

THE ELEVATED RAILROADS in New York City have caused a new danger to eyesight, and both from the minute filings made by the working of the brakes and from the dropping of live coals and sparks the passers-by need to be greatly on their guard. There have been several cases in the courts where damages were demanded for serious injury to the eyes, and in them all the railroad companies have been obliged to pay handsomely. In one case a lady, walking on the sidewalk over which the railroad structure was built, was injured by a hot cinder striking her full in the eye and permanent injury was caused, so that the jury, on the trial, awarded two thousand dollars damages. In another case, a similar injury from a spark led a jury to give a large verdict; and in a third, where the injury was produced by a fine steel filing lodging in the eye, an equally large verdict was rendered.

THE CHOLERA IN EUROPE.—In Spain the epidemic is in progress, and shows no signs of abating; and it has again broken out in Marseilles.

NOTES AND QUERIES.

VIS MEDICATRIX NATURE WANTED.

TO THE EDITOR OF THE PHILA. MEDICAL TIMES:

Although I may be regarded by many as an old fogey, and my views necessarily antiquated, yet I cannot help observing that in these days of microscopic discovery and gynecological research—when every human being is subject to hidden dangers from the micrococcus, the bacillus, or the bacteria, and all the other unseen poisons of the air we breathe, the waters we drink, and the food by which we are nourished—it is not considered safe for us to attend to any of the wants or duties of nature without being provided with antiseptics and other appliances to protect our valuable lives from the inroads of unseen and unknown diseases, which may be lurking in some quiet corner of our bodies, to burst out, like a midnight assassin, and destroy us suddenly.

The Creator does not make men perfect, and babies, being born in an imperfect condition, must be handed over to the specialist to be finished off. Having astigmatism, they must have glasses to correct their vision, splints to straighten their legs and stiffen their spines, or circumcision performed to control the nervous system, with various remedies and appliances which are considered requisite to perfect the human biped.

A short time since it was discovered that the cervix uteri was too long, and must be cut off; now it is torn, or the perineum is lacerated, whenever a babe is born, and the gynecologist must be called in, like a skilful tailor, to sew up the rent.

If we may believe in the number of operations performed by the gynecologists, both old and young, we must suppose that the process of parturition is different from what it was fifty years ago, since it requires so much care and watchfulness by the medical attendant that woman should be able properly to obey the command of her Creator to increase and multiply and thus people the earth.

If my memory serves me aright, there was once an old doctor named Vis Medicatrix Nature, who was very successful in the cure of disease. I think he still lives and practises, —for I have not yet heard of his death,—and perhaps he has something to do with these wonderful cures. How else can such things be, unless nature has changed? Or am I growing too old to understand these modern improvements of the healing art? Alas, it may be so!

Wm. T. TAYLOR, M.D.

1324 NORTH FIFTEENTH STREET, August 3, 1885.

TREATMENT OF DIPHTHERIA.

MR. EDITOR,—During the winter of 1881 I began to treat diphtheria with sulphite of soda. Up to that time I had been using quinine, iron, and chlorate of potash internally, with solution of nitrate of silver as a local application, and milk-punch and beef-tea to keep up the strength. Finding the above treatment very unsatisfactory, I began to use the following, with much happier results. If the patient is seen early, before much weakness is developed, I give a moderate dose of calomel, followed in *one hour* by solution of citrate of magnesia; at the same time I order sulphite of soda in tenfold to twenty-grain doses every hour, dissolved in a tablespoonful of pure water (no syrup or glycerin). The remedy is to be kept up every hour until the membrane begins to disappear, which in my cases was in from twenty-four to forty-eight hours. As soon as the membrane begins fairly to disappear, I give the sulphite every third hour until my patient is out of bed, and then three times a day until the patient entirely recovers. As auxiliary to the sulphite, I let the patient gargle the throat with a solution containing tannic acid and chlorate of potash every two hours. I have found that one of the best things to apply to the outside of the throat is the fat of the cured ham, sliced thin and sewed on flannel. To keep up the strength I give pure milk (cold) *ad lib.*, with brandy mixed with hot water and sugar every two hours,—perfect quiet in bed, plenty of fresh air, and a warm room. Since adopting the above treatment I have lost but two cases of diphtheria out of a considerable number of cases treated in the last four years.

B. F. NICHOLLS, M.D.

719 SPRUCE STREET.

OBITUARY.

PROF. HENRI MILNE-EDWARDS, the eminent physiologist, died on the 28th of July, in Paris, at the age of eighty-five years. He was born at Bruges, October 23, 1800, of English parents, his father being also well known for his physiological investigations. Having graduated in medicine in 1823, Prof. Milne-Edwards, in a long and busy life, filled many important positions and made many contributions to the literature of medicine and zoology. His greatest work was his "Leçons sur la Physiologie et l'Anatomie comparée de l'Homme et des Animaux" (1857-1877), the publication of which was celebrated by some of his old pupils last year by a fête, when a medal was struck to commemorate the event, bearing the image of the celebrated professor and an inscription setting forth his distinguished services to science and education. At the time of his death he was Professor of Zoology, member of the Institute, and Dean of the Faculty of Sciences. He had been Commander of the Legion of Honor since 1861.

OFFICIAL LIST

OF CHANGES IN THE STATIONS AND DUTIES OF OFFICERS SERVING IN THE MEDICAL DEPARTMENT U.S. ARMY FROM AUGUST 2, 1885, TO AUGUST 15, 1885.

COLONEL JOHN CAMPBELL, SURGEON.—Granted leave of absence for one month.

FIRST-LIEUTENANT FRANCIS J. IVES, ASSISTANT-SURGEON (recently appointed).—Ordered for duty in Department of the Platte.

S. O. 184, A. G. O., August 13, 1885.

SURGEON J. M. BROWN, ASSISTANT-SURGEONS CLARENCE EWEN, A. W. TAYLOR.—Ordered to rejoin their proper stations in Department of the Platte.

ASSISTANT-SURGEONS G. L. EDIE AND C. S. BLACK.—Ordered to rejoin their proper stations in the Department of Texas.

G. O. No. 7, Division of the Missouri, August 1, 1885.

CAPTAIN THOMAS F. APPELL, ASSISTANT-SURGEON.—Retired from active service, August 10, 1885. S. O. 181, A. G. O., August 10, 1885.

CAPTAIN J. L. POWELL, ASSISTANT-SURGEON.—Assigned to temporary duty at Fort Leavenworth, Kansas. S. O. 110, Department of the Missouri, July 30, 1885.

FIRST-LIEUTENANT WM. D. DIRTZ, ASSISTANT-SURGEON.—Ordered from Fort Selden to Fort Stanton, New Mexico. S. O. 111, Department of the Missouri, July 31, 1885.

FIRST-LIEUTENANT A. R. CHAPIN, ASSISTANT-SURGEON.—Granted one month's leave, to take effect when services can be spared by the commanding general of the Department of the Missouri, with permission to apply for one month's extension. S. O. 179, A. G. O., August 6, 1885.

FIRST-LIEUTENANT PHILIP G. WALES, ASSISTANT-SURGEON (Fort Cœur d'Alène, Idaho).—Ordered for temporary duty at Boise Barracks, Idaho. S. O. 130, Department of Colorado, August 1, 1885.

WILLIAM P. KENDALL.—Appointed to be Assistant-Surgeon, U.S.A., with rank of First-Lieutenant, to date from August 12, 1885.

LIST OF CHANGES IN THE MEDICAL CORPS OF THE U.S. NAVY FROM AUGUST 8, 1885, TO AUGUST 15, 1885.

BEYER, H. G., PASSED ASSISTANT-SURGEON.—To attend meeting of the "American Association for the Advancement of Sciences," at Ann Arbor, Michigan, and at conclusion of meeting to resume duty at the Smithsonian Institute.

BOYD, JOHN C., PASSED ASSISTANT-SURGEON.—From Navy-Yard, Washington, D.C., to special duty at Bureau of Medicine and Surgery, Washington, Navy Department.

LIPPINCOTT, J. C., PASSED ASSISTANT-SURGEON.—To Navy-Yard, Washington, D.C., as relief of Passed Assistant-Surgeon Boyd.

OWENS, THOMAS, ASSISTANT-SURGEON.—From special duty at Bureau of Medicine and Surgery, Navy Department, and waiting orders.

SAYRE, J. S., ASSISTANT-SURGEON.—From U.S.R.S. "Independence" to Naval Hospital, Mare Island, California.